FIGURE 8

GTGTACGAAAGAGAAACCCGGAGGGCCCGGGGACTGGGCCCGGGGTCTGCAGGCTCAGCTGAGCCCATGAGCTC CCAGAGCTAACCCCTGAACACCCAGGCGGGCAAAGGGCTGATGTCGGTAGTCCCCATCCTGGAGGGGCAGGCTCT ${\tt GCGCATCTGCTCCTGGC}$ CCATGGAGAACACGGCCCAGCTGCCGAGTGCTGTGTGGATGTGGTGGGCGTCAACGCCAGCTGCCCAGGCGCAA GTCTGTGTGGTCCAGGCTGTTACAGGCGCTGGAACGCGGACGGGAGCGCCAGCTGCGTCCGCTGTGGGAACGGAA CCCTCCCAGCCTACAACGGCTCCGAGTGTAGAAGCTTTGCTGGCCCGGGTGCGCCATTCCCCATGAACAGAAGCT GCTCCGGCCTCATCCTCTCCGTAGCTGGGTTCTTCTACCTCAAGCGCCTCCAGTAAACTCCCCAGGGCCTGCTACA GAAGAAACAAAGCTCCGGCCCTGCAGCCTGGCGAAGCCGCTGCAATGATCCCCCGCCACAGTCCTCAGTACGGA AGCCGCGCTACGTCAGGCGGGAGCCGCCCTGGACAGGGCCACGGATCCCGCTGCCTTCCCGGGGGAGGCCCGTA GGGAACCAGCACAAAGTGTTGGCATCGCCCGGCCCCGGGACAGTCCTGGGCACAGCCTCGGCTCTGGGTCCCTC CGCCTCCCAGCGACGGCCAAAGGGTCCCGGGCCGCCTGAGGCTCCCCCCACCACCACCATCTCGTTTATCG ${\tt GACCAGGAGCATCCATGAGACCTCAGAGCTTCAGATCGAGGCCTTGGGGGGTCCGGGCCCCCCAGGAAAC}$ ${\tt ACGGTGAGGCCCAGCGCCTGCAGCCAAAGCTGGCACGATCTATGGGGCAGGTGCCGCTCTGCCTAGAAAAGCCA}$ GGGGCTCTGCCGTGCCCTCCAGAGCCCACAGCGGGCAGGACTCCTCCAGCACCACCACCCAGTGGCCCGA GACCCCTCTGAGAACAGTGAGGCTGGTCCTCGTGCCGTTCCAGCCGGTGCCCGGCCAGTGGGGAGGACACAGCCT CCATTTCCGGAGCTGCAGGATAGAGCTTCCTCTTGATCTCTGTTTTTAAGCAGAAATTCATTGTGCTGAAAAGTC CTCCAGAGCTCTGTGGCCCCGCTCGGATCCGCTGGACCCCCATGCCTGGCTGATCCCTGCCCACGTGGGGCAGGC ${\tt CCACATCTAACCCCCACAAGTCACTGCCTCACTGCACCTGCCAAGGCTGCCCTGGCGCTGAGTCCTGGGGTCCCT}$ $\verb|CCCGGAGTTCCTGGGAGAAAGGCGCCGTCGTGGCCCGCCTCCCGCACGCCCAGGCCCGGGCTCCACCGTGGGTCTCA|\\$ GACGCCCTGCGGCACCGGCACCGTCTTAGCATGGGACCCCCATCTGAGGGGTGGCCTGGCCTTCGGGGTCC CCACGCTCCTTTGCGAAGTCCACTGTGGGTGCCATCATGGTCTCCGGGACCTGGGCCAGCGGGAACGTGGGGGCA

9/6881 FIGURE 9

 $\label{thm:malkallagllvgvasksmentaqlpeccvdvvgvnascpgaslcgpgcyrrwnadgsascvrcgngtlpayn\\ \texttt{GSECRSFAGPGAPFPMNRSSGTPGRPHPGAPRVAASLFLGTFFISSGLILSVAGFFYLKRSSKLPRACYRRNKAP}\\ \texttt{ALQPGEAAAMIPPPQSSVRKPRYVRRERPLDRATDPAAFPGEARISNV}$

FIGURE 10

 ${ t TCCCGGCGGCGGTGCGGCGGTGCGAGC} { t ATC} { t TCGTGGCTCTTCGGCATTAACAAGGGCCCCAAGGGTGA}$ CCGGCCGGCGCCAAGGACAAATGGAGCAACTTCGACCCCACCGGCCTGGAGCGCGCCGCCAAGGCGGCGCGCGA GCTGGAGCACTCGCGTTATGCCAAGGACGCCCTGAATCTGGCACAGATGCAGGAGCAGACGCTGCAGTTGGAGCA GAGGAGGAAGACCCTGAGCGAGGAGACCCGGCAGCACCAGGCCCAGGGCCCAGTATCAAGACAAGCTGGCCCGGCA GCGCTACGAGGACCAACTGAAGCAGCAACTTCTCAATGAGGAGAATTTACGGAAGCAGGAGGAGTCCGTGCA GAAGCAGGAAGCCATGCGGCGAGCCACCGTGGAGCGGGAGATGGAGCTGCGGCACAAGAATGAGATGCTGCGAGT GGAGGCCGAGGCCGGGCGCGCCAAGGCCGAGCGGGAGAATGCAGACATCATCCGCGAGCAGATCCGCCTGAA ${\tt GGCGGCCGAGCACCGTCAGACCGTCTTGGAGTCCATCAGGACGGCTGGCACCTTGTTTGGGGAAGGATTCCGTGC}$ $\verb|CCGCATCACGGTGCTTGAGGCGGCACCCCATCCAGGTCAGCCGGCGGCTCCTCAGTCGACCCCAGGACGC|\\$ GCTGGAGGGTGTTGTGCTCAGTCCCAGCCTGGAAGCACGGGTGCGCGACATCGCCATAGCAACAAGGAACACCAA GAAGAACCGCAGCCTGTACAGGAACATCCTGATGTACGGGCCACCAGGCACCGGGAAGACGCTGTTTGCCAAGAA ACTCGCCCTGCACTCAGGCATGGACTACGCCATCATGACAGGCGGGACGTGGCCCCCATGGGGCGGGAAGGCGT GACCGCCATGCACAAGCTCTTTGACTGGGCCAATACCAGCCGGCGCGCCTCCTGCTCTTTGTGGATGAAGCGGA CGCCTTCCTTCGGAAGCCACCGAGAAGATAAGCGAGGACCTCAGGGCCACACTGAACGCCTTCCTGTACCG TGACCGCATCAATGAGATGGTCCACTTCGACCTGCCAGGGCAGGAGGGAACGGGAGCGCCTGGTGAGAATGTATTT TGACAAGTATGTTCTTAAGCCGGCCACAGAAGGAAAGCAGCGCCTGAAGCTGGCCCAGTTTGACTACGGGAGGAA $\tt GTGCTCGGAGGTCGCTGACGGAGGGCATGTCGGGCCGGGAGATCGCTCAGCTGGCCGTGTCCTGGCAGGC$ ${\tt CACGGCGTATGCCTCCGAGGACGGGGTCCTGACCGAGGCCATGATGGACACCCGCGTGCAAGATGCTGTCCAGCA}$ ${\tt GCACCAGCAGAAGATGTGCTGGAAGGCCGGAAGGCCTTGGGCGTGGGGACGAGCCTTCCCCATCC} {\tt TGA}{\tt GTCCA}$ CAGGGAGATCCACAGCTCACGGAGCCTGGCCGGACCCCTCCCACCCCTGCCTTGCCGGCCCCTGCACATTTAG GATATGCTCCTGGGTGGGGACTGGGCTGTGCCCAGGGCCTCTGTCCCCCAGGATGTCTTGTGGTGCGGGTCGGCC ACAGCAGAGCCAGGTGAGGGGGGCGCCTGCCAGGGCCAGACCCAGGTGGGGCAGCCTGAACCCTGCTTCCCCCTGT GAGGCCGCACTGTCAGCCGGTCCAAGCCTGTGGCTGGAGCTGGGGTCTGTTTACCTAATAAAGTCCCACAG GTGCCTCATT

FIGURE 11

MSWLFGINKGPKGEGAGPPPPLPPAQPGAEGGGDRGLGDRPAPKDKWSNFDPTGLERAAKAARELEHSRYAKDAL NLAQMQEQTLQLEQQSKLKEYEAAVEQLKSEQIRAQAEERRKTLSEETRQHQARAQYQDKLARQRYEDQLKQQQL LNEENLRKQEESVQKQEAMRRATVEREMELRHKNEMLRVEAEARARAKAERENADIIREQIRLKAAEHRQTVLES IRTAGTLFGEGFRAFVTDWDKVTATVAGLTLLAVGVYSAKNATLVAGRFIEARLGKPSLVRETSRITVLEALRHP IQVSRRLLSRPQDALEGVVLSPSLEARVRDIAIATRNTKKNRSLYRNILMYGPPGTGKTLFAKKLALHSGMDYAI MTGGDVAPMGREGVTAMHKLFDWANTSRRGLLLFVDEADAFLRKRATEKISEDLRATLNAFLYRTGQHSNKFMLV LASNQPEQFDWAINDRINEMVHFDLPGQEERERLVRMYFDKYVLKPATEGKQRLKLAQFDYGRKCSEVARLTEGM SGREIAQLAVSWQATAYASEDGVLTEAMMDTRVQDAVQQHQQKMCWLKAEGPGRGDEPSPS

12/6881 FIGURE 12

FIGURE 13

MAPAAASPPEVIRAAQKDEYYRGGLRSAAGGALHSLAGARKWLEWRKEVELLSDVAYFGLTTLAGYQTLGEEYVS
IIQVDPSRIHVPSSLRRGVLVTLHAVLPYLLDKALLPLEQELQADPDSGRPLQGSLGPGGRGCSGARRWMRHHTA
TLTEQQRRALLRAVFVLRQGLACLQRLHVAWFYIHGVFYHLAKRLTGITYLRVRSLPGEDLRARVSYRLLGVISL
LHLVLSMGLQLYGFRQRQRARKEWRLHRGLSHRRASLEERAVSRNPLCTLCLEERRHPTATPCGHLFCWECITAW
CSSKAECPLCREKFPPQKLIYLRHYR

FIGURE 14

GTGTGGGCGCGTCAGGCCGCGACGAGGGCGCTGAGACAAATTTACATGTATTGGAGACCAGACCAGAAGCCCTTC GATCACAAACAACATCGACCCAGTGGGAAGAATCCAAATGCGCACGAGGAGGACACTGCGGGGGCACCTGGCCAA GATCTACGCCATGCACTGGGGCACAGACTCCAGGCTTCTCGTCAGTGCCTCGCAGGATGGTAAACTTATCATCTG GGACAGCTACACCACCAACAAGGTCCACGCCATCCCTCTGCGCTCCTGGGTCATGACCTGTGCATATGCCCC TTCTGGGAACTATGTGGCCTGCGGTGGCCTGGATAACATTTGCTCCATTTACAATCTGAAAACTCGTGAGGGGAA CGTGCGCGTGAGTCGTGAGCTGGCAGGACACACGGTTACCTGTCCTGCTGCCGATTCCTGGATGACAATCAGAT CGTCACCAGCTCTGGAGACACCACGTGTGCCCTGTGGGACATCGAGACCGCCCAGCAGACGACCACGTTTACCGG ACACACTGGAGATGTCATGAGCCTTTCTCTTGCTCCTGACACCAGACTGTTCGTCTCTGGTGCTTGTGATGCTTC AGCCAAACTCTGGGATGTGCGAGAAGGCATGTGCCGGCAGACCTTCACTGGCCACGAGTCTGACATCAATGCCAT TTGCTTCTTCCAAATGGCAATGCATTTGCCACTGGCTCAGACGACGCCACCTGCAGGCTGTTTGACCTTCGTGC TGACCAGGAGCTCATGACTTACTCCCATGACAACATCATCTGCGGGATCACCTCTGTCTCCCTTCTCCAAGAGCGG GCGCCTCCTCCTTGCTGGGTACGACGACTTCAACTGCAACGTCTGGGATGCACTCAAAGCCGACCGGGCAGGTGT GGATAGCTTCCTCAAGATCTGGAACTAACGCCAGTAGCATGTGGATGCCATGGAGACTGGAAGACCATTCCAACT TGGACGCGTTACCATGAGAGCATATCCTATCCAACCGTACTAACGTGGACACCCTACACCTCCCCTCAGAACTTC AAAAGGGCAAGATCTTTTTTCCTTCACTTATTGCTGAAACCAAGAGCACAATTCCCATTGAGAGAAAGATCTCTG CACCAGTGTATTTGAATTTTAGACCAGTGACCCTGTTTTGTGGCATTCATGCAAAACATGCTGAGGGCTTTGTTC ATCTGGTCATCGTGTCCAAATTTCAGTCATGTTTGTAGCAAGATTTTGGAAGCATTCATATTTCCTTTTTAAAAT GTATTCCTTTGTGTTCAACAGTTAATCAAAACCAGAGGTCTAGGGCAGCCTCTCTGATGTTGTCAATGATGTAA ATTCAGTCCCTGGTTTTTAATTTTCTGTCTGATGTCACAGATCATTGTTGCACACAAACGTGGCATAGAAAAGAA CATGTTCAGAAGCCATGGGGCCAAGCACATGCGGGGACGGTCTCAAATGCGTGATCAGAGAATCCTTCACCTTTG CTGAAAAGTGAGCTCAGATCCAGCACCATGTTCCTCCTGACCCATCCTGTCTATCTTCTCAGTTGAGTTTTTAAT CTCACTTTGGGTTTCCTTGTGAGGTTGGAGGGAAGTTTATAATAGCCTAACACTACCCCACCCCCAACTAGGAGG AAATCAATGTTTTGAAAATAATGATCTCAGACTTTCTAAGTTAAATTTTTAAAAATTTTTGATTGTTTGCCATATTG GGTGGGTTTACTCTTAGAATCGCATGCTGTAGAAATGCTCAAAAGTGCATATGGGACTCAGTCCTTAGGTGTTCT TTTTCTTTTAAGAAATAACCTCTTACAGTTGTAACCATTGCGGCTCTGTCCACTTCTCGTTGCTGCTGTGGCA CATATCGGAAGCAGTACAGCGCGCGCTCTACACGCTTGGGTAGCGGGATAAGTCACTGTTTTCTTTATTTCTTT GGAGTGAAGAGCCTGCCCTCCTATATGGATTCTTCAGGGCCCTCCACATCTGAGGTGGCTCATTCCCATCACACA CAGATTGTCCTGGTGTTCATTTCAAGGCCAGTGTTCAGCAGCAGCGTTTGGAAAGCAGGTTCTGTGGGACCCCCC GCCCGCCCCCGCACTCCTTCATAGCAGCAGTAGTGGCTTCTCCATCCTGTTTTCTGCAACATTCTATACAAAA CAACAACTCTGTAGAGCTCTCTGCACCCTTACCCCTTTCCACCTTTTGTATTTAATTTTAAAGTCAGTGTACTGC AAGGAAGCTGGATGCAAGATAGATACTATATTAAACTGTACTGTTATTTAAGATGTAATAAAGCAGTTTGACATG

FIGURE 15

FIGURE 16

 ${\tt MGKTEEKGNGKGAFQERKGPLGAVRKEAGAGAQDAGAAEGAAVKKMTFSEHPYNNLRKRFGALLSDQGFDLMNKFLTYFPGRRISAEDGLKHEYFRETPLPIDPSMFPTWPAKSEQQRVKRGTSPRPPEGGLGYSQLGDDDLKETGFHLTTINQGASAAGPGFSLKF$

FIGURE 17

FIGURE 18

 ${\tt MPSSPLRVAVVCSSNQNRSMEAHNILSKRGFSVRSFGTGTHVKLPGPAPDKPNVYDFKTTYDQMYNDLLRKDKEL YTQNGILHMLDRNKRIKPRPERFQNCKDLFDLILTCEERVYDQVVEDLNSREQETCQPVHVVNVDIQDNHEEATL GAFLICELCQCIQHTEDMENEIDELLQEFEEKSGRTFLHTVCFY}$

FIGURE 19

CCTGGCCACCGGCTCGCGGCGTGGAGGCTGCTCCCAGCCGCGCCCGAGTCAGACTCGGGTGGGGGTCCCGGCG GCGGTAGCGGCGGCGGCGGCGAGCATGTCGTGGCTCTTCGGCGTTAACAAGGGCCCCCAAGGGTGAAGGCGCGG AGACCCTGAGCGAGGAGCCCGGCAGCACCAGGCCCAGGTATCAAGACAAGCTGGCCCGGCAGCGCTACG AGGACCAACTGAAGCAGCAACTTCTCAATGAGGAGAATTTACGGAAGCAGGAGGAGTCCGTGCAGAAGCAGG AAGCCATGCGGCGAGCCACCGTGGAGCGGGAGATGGAGCTGCGGCACAAGAATGAGATGCTGCGAGTGGAGACCG AGGCCCGGGCGCGCCCAAGGCCGAGCGGAGAATGCAGACATCATCCGCGAGCAGATCCGCCTGAAGGCGTCCG AGCACCGTCAGACCGTCTTGGAGTCCATCAGGACGGCTGGCACCTTGTTTGGGGAAGGATTCCGTGCCTTTGTGA CGACAGCCGTCACTGGCCGCTTCATCGAGGCTCGGCTGGGGAAGCCGTCCCTAGTGAGGGAGACGTCCCGCATCA GTGTTGTGCTTAGTCCCAGCCTGGAAGCACGGGTGCGCGACATCGCCATAGCAACCAGGAACACCAAGAAGAACC GGGGCCTGTACAGGCACATCCTGCTGTATGGGCCACCAGGCACCGGGAAGACGCTGTTTGCCAAGAAACTCGCCC TTCGGAAGCGAGCCACTGAGGAGATAAGCAAGGACCTCAGAGCCACACTGAACGCCTTCCTGTACCACATGGGCC AACACAGCAACAAATTCATGCTGGTCCTGGCCAGCAATCTGCCTGAGCAGTTCGACTGTGCCATCAACAGCCGCA GTGTTCTTAAGCCGGCCACAGAAGGAAAACGGCGCCTGAAGCTGGCCCAGTTTGACTACGGGAGGAAGTGCTCGG ${\tt AGGTCGCTCGGCTGACGGAGGCCATGTCGGGCCGGGAGATCGCTCAGCTGGCCGTGTCCTGGCAGGCCACGGCAT}$ ATGCCTCCAAGGACGGGTCCTCACTGAGGCCATGATGGACGCCTGTGTGCAAGATGCTGTCCAGCAGTACCGAC AGAAGATGCGCTGGCTGAAGGCGGAGGGCCTGGGCGCGGGGTCGAGCACCCCCTATCCGGAGTCCAAGGCGAGA $\verb|CCCTCACCTCATGGAGCCTGGCCACGGACCCCTCCTACCCCTGCCTTGCCGGCCCCTGCACATTTAGGATATGCT|\\$ ${\tt CCTGGATGGGGACTGGGCCTGTGCCCAGGATGTCTTGTGGTGGCGGTCGGCCGTTCTGCC}$ GAGATGCATTTTCCGTCTGGCTCACAGGGGGAGGGTGAGGCTTTGTACCCCAGCCCCTGCCCAGGCCACTGTGAG GCCAGGTGAGGGGGGGCCTGCCAGGACTAGACAGAAGTGGGGCGGC

20/6881 FIGURE 20

ATGAGGCTGCAGAGTGATGTGGGGGCCAGCGGTGACTTCATGACCACACTGCGCCCAGGTGTAAGAGGGCACGCT TCTGCCCAGGCATCGTCCATGGAAGACACGCAGTCGGCCACTGCAGCCTCGGTCCTGGGTGCCTGGGGCTGGGT CACTGGGGGCCACAGGCCACAGAGACCACAGTCCTGGCATGCCATGCAGCTCCCTGTCCCCAGAGGCCATG TCAAAGGACGCCCTGAATCTGGCGCAGATGCAGGAGCAGACGCTGCAGTTGGAGCAACAGTCCAAGCTCAAACAA CTTGTCAATGAGGATTTACGGAAGCAGGAGGAGTCCGTGCAGAAGCACCATCAGACCTTCTTGGAGTCCATCAGG GCGGCTGGCACCTTGTTTGGGGAAGGATTCCGTGCCTTTGTGACAGACCGGGACAAAGTGACAGCCACGGTGGCT GGGCTGACGCTGCTGGCGGGTCTACTCAGCCAAGAATGCGACAGCCGTCACTGGCCGCTACATCGAGGCT CGGCTGGGGAAGCCGTCCCTAGTGAGGGAGACGTCCCGCATCACGGTGCTTGAGGCGCTGCGGCACCCCATCCAG ${\tt CAGGTCAGCCGGCGGCTCCTCAGTCGACCCCAGGACGTGCTGGAGGGTGTTGTGCTTAGTCCCAGCCTGGAAGCA}$ ACAGGCGGGGACGTGGCCCCCATGGGGCGGGAAGGCGTGACCGCCATGCACAAGCTCTTTGACTGGGCCAATACC GAGGACCTCAGGGCCACACTGAACGCCTTCCTGTACCGCACGGGCCAGCACAACAAATTCATGCTGATCCTG GCCAGCTGCCACCCGAGCAGTTCGACTGGGCCATCAATGCCTGCATCGACGTGATGGTCCACTTCGACCTGCCA GGGCAGGAGGAGCGGCGCCCTGGGATTGGAGGGAGAGGCTCCTCATGAGACCCCCATGTCGGGACTAGAGGGA GGTGTGGGGCGCGCTCTTGCTTCCTGCTGCACATGTGCCTTGAGGCTGTCAGGCTCCCTGTTGCTGGCGGGCCC ${\tt CGGTTTCTGAGTCCTTGTGCACCTGACCCAAATCCCTGCTGTCGCCAGTGACGACAAAAGCTGCTCTGTTCCA}$ AAGAGAGCCTGGTTCTCCCCTGCCGACCCCTCCACTGCCGCCTGCTCCATGCTAGACCAGCTTTCCGGGCGTCTG ATCGCACAGCTGGCCGTGTCCTGGCAGGCCACGGCGTATGCCTCCAAGGACGGGGTCCTGACCGAGGCCATGATG GAGGACGAGCAACCCTCATCC<u>TGA</u>

21/6881 FIGURE 21

MRLQSDVGASGDFMTTLRPGVRGHASAQASSMEDTQSATAASVLGALGLGHWGPQATLRDHSPGMPCSSLSPEAM SKDALNLAQMQEQTLQLEQQSKLKQLVNEDLRKQEESVQKHHQTFLESIRAAGTLFGEGFRAFVTDRDKVTATVA GLTLLAVGVYSAKNATAVTGRYIEARLGKPSLVRETSRITVLEALRHPIQQVSRRLLSRPQDVLEGVVLSPSLEA RVRDIAIMTRNIKKNRGLYRHILLYGPPGTGKTLFAKKLALHSGMDYAIMTGGDVAPMGREGVTAMHKLFDWANT SRRGLLLFVDEADAFLRKRATEKISEDLRATLNAFLYRTGQHSNKFMLILASCHPEQFDWAINACIDVMVHFDLP GQEERARLGLEGEAPHETPMSGLEGEAPHGPLLASGLASLQLPHPALEPRGVGRGSCFLLHMCLEAVRLPVAGGP RFLSPSVHLTQIPAVASDDKSCSVPKRAWFSPADPSTAACSMLDQLSGRLKLAQFDYGRKCLEIARLTEGMSCRK IAQLAVSWQATAYASKDGVLTEAMMDACVQDFVQQHQQMMRWLKGERPGPEDEQPSS

FIGURE 22

FIGURE 23

MLLGRLTSQLLRAVPWAGGRPPWPVSGVLGSRVCGPLYSTSPAGPGRAASLPRKGAQLELEEMLVPRKMSVSPLE SWLTARCFLPRLDTGTAGTVAPPQSYQCPPSQIGEGAEQGDEGVADAPQIQCKNVLKIRRRKMNHHKYRKLVKKT RFLRRKVQEGRLRRKQIKFEKDLRRIWLKAGLKEAPEGWQTPKIYLRGK

24/6881 FIGURE 24

CGCGCGGCTCCGCGCCGCCGCGCCATGGCGGAGACCAAGATTATCTACCACATGGACGAGGAGGAGACGCC GTACCTGGTCAAGCTGCCCGTGGCCCCGAGCGCGTCACGCTGGCCGACTTCAAGAACGTGCTCAGCAACCGGCC CGTGCACGCCTACAAATTCTTCTTTAAGTCCATGGACCAGGACTTCGGGGTGGTGAAGGAGGAGATCTTTGATGA GGGGTCCCAGGGCACGGACAGCCACACAGACCTGCCCCCGCCTCTTGAGCGGACAGGCGGCATCGGGGACTCCCG GCCCCCTCCTTCCACCCAAATGTGGCCAGCAGCCGTGACGGGATGGACAACGAGACAGGCACGGAGTCCATGGT CAGTCACCGGCGGAGCGTGCCCGACGCCGGAACCGCGAGGAGGCCGCCCGGACCAATGGGCACCCAAGGGGAGA CCGACGCCGGGATGTGGGGCTGCCCCCAGACAGCGCGTCCACCGCCCTCAGCAGCGAGCTTGAGTCCAGCAGCTT TGTGGACTCGGACGAGGATGGCAGCACGAGCAGGCTCAGCAGCTCCACGGAGCAGCACCTCATCCAGACTCAT CCGGAAGCACAAACGCCGGCGGAGGAAGCAGCGCCTTCGGCAGGCGGACCGGGCCTCCTCCTTCAGCAGCATAAC CGACTCCACCATGTCCCTCAACATCGTCACTGTCACGCTCAACATGGAAAGACATCACTTTCTGGGCATCAGCAT CGTGGGGCAGAGCAACGACCGTGGAGACGGCGGCATCTACATTGGCTCCATCATGAAGGGCGGGGCTGTGGCCGC TGACGGCCGCATCGAGCCCGGCGACATGTTGCTGCAGGTGAATGACGTGAACTTTGAGAACATGAGCAATGACGA TGCCGTGCGGGTGCTGCGGGAGATCGTTTCCCAGACGGGGCCCATCAGCCTCACTGTGGCCAAGTGCTGGGACCC AACGCCCCGAAGCTACTTCACCGTCCCACGGGCTGACCCGGTGCGGCCCATCGACCCCGCCGCCTGGCTGTCCCA CACGGCGCACTGACAGGAGCCCTGCCCCGCTACGAGCTGGAAGAGGCGCCGCTGACGGTGAAGAGTGACATGAG CGCCGTCGTCCGGGTCATGCAGCTGCCAGACTCGGGACTGGAGATCCGCGACCGCATGTGGCTCAAGATCACCAT GGCCCGGAAGTACGCCAGCAGCTTGCTGAAGCACGGCTTCCTGCGGCACACGGTCAACAAGATCACCTTCTCCGA GCAGTGCTACTACGTCTTCGGGGATCTCTGCAGCAATCTCGCCACCCTGAACCTCAACAGTGGCTCCAGTGGGAC TTCGGATCAGGACACGCTGCCCCGCTGCCCCACCCGGCTGCCCCCTGGCCTCTGGGTCAGGGCTACCCTACCA GTACCCGGGACCCCACCCTGCTTCCCGCCTGCCTACCAGGACCCGGGCTTTAGCTATGGCAGCGGCAGCACCGG GAGTCAGCAGAGTGAAGGGAGCAAAAGCAGTGGGTCCACCCGGAGCAGCCGCCGGGCCCCGGGCCGTGAGAAGGA GCGTCGGCCGCGGGGCCTGGGGGCAGTGCAGTGAATCGGATCACACGGCACCGAGTGGGGTGGGGAGCAGCTG GCGAGAGCGTCCGGCCGGCCAGCTCAGCCGTGGCAGCAGCCACGCAGTCAGGCCTCGGCTACCGCCCCGGGGCT CCCCCGCCCACCCACGACCAAGGCCTATACAGTGGTGGGGGGGCCACCCGGGGGACCCCCTGTCCGGGAGCT GGCTGCCGTCCCCCGGAATTGACAGGCAGCCGCCAGTCCTTCCAGAAGGCTATGGGGAACCCCTGCGAGTTCTT GCCCTGGCAGCCTGGCTGCTCCAGCTCCTGACAGCACCTGTGTCTGAGCAGCCGTGTTGGGGGGCGCTCCCTCTCT GCCCTCAGCGAGAGCCTCGGACCTCCCAACCCCTTGTGTCTGGTGGGGATCCCTCCTGGGATGAGGAAGACCCC CTCGGGCTCTCGGCTGACCCCCACCTCCTGCACAGCTGTGCCCAGGCCCCCAGGGTGGTCCATGCGGGGCAACCC AGGAGGCGACCCTGTCATCTGTCCCACCTGCTGCTGCCCCTTGGAGCAGCCTGCACCTTCTCTCCCCATCCGG CAACAGTCTGAAAGTACGTGGAGGACGGGACCGGAAGACGAGAGGGGCTGGACATCCTGCCCACCGTGTCCCAG TGGGGAGATGGGCAGTCAGGTGGCCCGTCCTTGGTGAGTGCACACACTGCGCGCACACATCGCGGCCTTCCTGGC TTCTCTGGCCCCCACGTGTCTGTGCTGTAGATACTGTATCAAAGTCCCAGCGTTTAGATGGTTAACATAGAGCTG CTTCTGTGTAAATGCTGCTTATTTTAAACACTAAAAAGCGTTTAATTTTATGGG

25/6881 FIGURE 25

MAETKIIYHMDEEETPYLVKLPVAPERVTLADFKNVLSNRPVHAYKFFFKSMDQDFGVVKEEIFDDNAKLPCFNG RVVSWLVLAEGAHSDAGSQGTDSHTDLPPPLERTGGIGDSRPPSFHPNVASSRDGMDNETGTESMVSHRRERARR RNREEAARTNGHPRGDRRDVGLPPDSASTALSSELESSSFVDSDEDGSTSRLSSSTEQSTSSRLIRKHKRRRK QRLRQADRASSFSSITDSTMSLNIVTVTLNMERHHFLGISIVGQSNDRGDGGIYIGSIMKGGAVAADGRIEPGDM LLQVNDVNFENMSNDDAVRVLREIVSQTGPISLTVAKCWDPTPRSYFTVPRADPVRPIDPAAWLSHTAALTGALP RYELEEAPLTVKSDMSAVVRVMQLPDSGLEIRDRMWLKITIANAVIGADVVDWLYTHVEGFKERREARKYASSLL KHGFLRHTVNKITFSEQCYYVFGDLCSNLATLNLNSGSSGTSDQDTLAPLPHPAAPWPLGQGYPYQYPGPPPCFP PAYQDPGFSYGSGSTGSQQSEGSKSSGSTRSSRRAPGREKERRAAGAGGSGSESDHTAPSGVGSSWRERPAGQLS RGSSPRSQASATAPGLPPPHPTTKAYTVVGGPPGGPPVRELAAVPPELTGSRQSFQKAMGNPCEFFVDIM

26/6881 FIGURE 26

GCACCGCCCCGCAGAAAAGATGGCAGTGGCCTGATCCGGGCCCGTTGGCGGCGTCACTGACGCTTCGCTC CGGTCCTCGGATCCCGAGCGCGGGGAGGCAGACCGACTGTGAGCTGCTTGTCCCCATCCTGCGGCCGTCCTGGGG ACACAGAGCCCTCCGTGGTGCCCGGGGATTGGATTGGAGCCAGGACCTCACTTCCTCCTCTGCCCCTGCCCCTGC CCCTCCCAGCACCTGGCCCACACCCTGCAGCCCCCCATGGTCTGGCCCTGGGTGGCGATGGCGTCCAGGTGGG GTCCCCTCATTGGCCTGGCTCCGTGCTCCTCTGGCTCCTGGGGGCAGTCCTTCTGATGGACGCGTCTGCACGGC CTGCCAACCACTCGTCCACTCGAGAGAGAGTAGCCAACAGGGAGGAGAATGAGATCCTGCCCCCAGACCACCTGA ACGGGGTGAAGCTGGAGATGGACGGCACCTCAATCGCGGCTTCCACCAGGAGGTCTTCCTAGGCAAGGACCTGG GTGGCTTTGATGAGGACGCGGAGCCGCGGAGCCGGAGGAGCTGATGGTCATCTTTTCCAAGGTGGATGTGA ACACTGACCGGAAGATCAGTGCCAAGGAGATGCAGCGCTGGATCATGGAGAAGACGGCCGAGCACTTCCAGGAGG CCATGGAGGAGAGCAAGACACTTCCGCGCCGTGGACCCTGACGGGGACGGTCACGTGTCTTGGGACGAGTATA AGGTGAAGTTTTTGGCGAGTAAAGGCCATAGCGAGAAGGAGGTTGCCGACGCCATCAGGCTCAACGAGGAACTCA AAGTGGACGAGGAAACACAGGAAGTCCTGGAGAACCTGAAGGACCGCTGGTACCAGGCGGACAGCCCCCCTGCAG ACCTGCTGCTGACGGAGGAGGAGTTCCTGTCGTTCCTCCACCCGAGCACAGCCGGGGAATGCTCAGGTTCATGG TGAAGGAGATCGTCCGGGACCTGGACCAGGACGGTGACAAGCAGCTCTCTGTGCCCGAGTTCATCTCCCTGCCCG TGGGCACCGTGGAGAACCAGCAGGGCCAGGACATTGACGACAACTGGGTGAAAGACAGAAAAAAAGGAGTTTGAGG AGCTCATTGACTCCAACCACGACGGCATCGTGACCGCCGAGGAGCTGGAGAGCTACATGGACCCCATGAACGAGT ACAACGCGCTGAACGAGGCCAAGCAGATGATCGCCGTCGCCGACGAGAACCAGAACCACCACCTGGAGCCCGAGG AGGTGCTCAAGTACAGCGAGTTCTTCACGGGCAGCAAGCTGGTGGACTACGCGCGCAGCGTGCACGAGGAGTTTT CTGTCCCGGACCCCACCTCTTCCCTGCCGCCCACCGGCCGACCGCCGCCGCCTGCCCCAGTTGATGAGCGGC GTGTCCCCTCTGCAGCGCGCACCCCGGCGGGCTTTGGCTGTGACGCGGTCGGGGCCGGGGCTGGGCTGTGGCC CCGCGGCGCCCCCCCCGGTCCCTCGAAATCGTGGCATCTCACTTCTGAGAACGAAATCTCGCTTCAGTCA AAAAAACAGCTCCTCCATTTCCTTGAAAACTGAACGATTATTAAAAATAGATTAAACTTCGCTGGAAATGAGTAG CCAGGAAGTTCAGGGGAGGTGCCGGGTCCTTCCCGGGCCTGGCGTGTCGGAGCCACCCAGGTCCCGCAGCTGCC GCTTCAAAAAAAAAAAAAAAAAAAAAAAAAAA

27/6881 FIGURE 27

MVWPWVAMASRWGPLIGLAPCCLWLLGAVLIMDASARPANHSSTRERVANREENEILPPDHLNGVKLEMDGHLNR GFHQEVFLGKDLGGFDEDAEPRRSRRKLMVIFSKVDVNTDRKISAKEMQRWIMEKTAEHFQEAMEESKTHFRAVD PDGDGHVSWDEYKVKFLASKGHSEKEVADAIRLNEELKVDEETQEVLENLKDRWYQADSPPADLLLTEEEFLSFL HPEHSRGMLRFMVKEIVRDLDQDGDKQLSVPEFISLPVGTVENQQGQDIDDNWVKDRKKEFEELIDSNHDGIVTA EELESYMDPMNEYNALNEAKQMIAVADENQNHHLEPEEVLKYSEFFTGSKLVDYARSVHEEF

28/6881 FIGURE 28

FIGURE 29

30/6881 FIGURE 30

 ${\tt MPKRKAEGDAKGGKAKVKDEPQRRSARLSAKPAPPKPEPKPKKTPAKKAEKVPKGKKGKADVDTHGHLGTKALWC} \\ {\tt GKTNLFLCPLLPFHLSA}$

31/6.881 FIGURE 31

TAGCTAGGCAGGAAGTCGGCGCGGGCGGGCGGACAGTATCTGTGGGTACCCGGAGCACGGAGATCTCGCCGGCT $\mathtt{C} \overline{\mathtt{ATG}}\mathtt{TCTATTCTCAAGATCCATGCCAGGGAGATCTTTGACTCTCGCGGGAATCCCACTGTTGAGGTTGATCTCTT$ CACCTCAAAAGGTCTCTTCAGAGCTGCTGTGCCCAGTGGTGCTTCAACTGGTATCTATGAGGCCCTAGAGCTCCG GGACAATGATAAGACTCGCTATATGGGGAAGGGTGTCTCAAAGGCTGTTGAGCACATCAATAAAACTATTGCGCC CAATGTCATCAATGGCGGTTCTCATGCTGGCAACAAGCTGGCCATGCAGGAGTTCATGATCCTCCCAGTCGGTGC AGCAAACTTCAGGGAAGCCATGCGCATTGGAGCAGAGGTTTACCACAACCTGAAGAATGTCATCAAGGAGAAATA TGGGAAAGATGCCACCAATGTGGGGGATGAAGGCGGGTTTGCTCCCAACATCCTGGAGAATAAAGAAGGCCTGGA GCTGCTGAAGACTGCTATTGGGAAAGCTGGCTACACTGATAAGGTGGTCATCGGCATGGACGTAGCGGCCTCCGA GTTCTTCAGGTCTGGGAAGTATGACCTGGACTTCAAGTCTCCCGATGACCCCAGCAGGTACATCTCGCCTGACCA GCTGGCTGACCTGTACAAGTCCTTCATCAAGGACTACCCAGTGGTGTCTATCGAAGATCCCTTTGACCAGGATGA CTGGGGAGCTTGGCAGAAGTTCACAGCCAGTGCAGGAATCCAGGTAGTGGGGGGATGATCTCACAGTGACCAACCC AAAGAGGATCGCCAAGGCCGTGAACGAGAAGTCCTGCAACTGCCTCCTGCTCAAAGTCAACCAGATTGGCTCCGT GACCGAGTCTCTTCAGGCGTGCAAGCTGGCCCAGGCCAATGGTTGGGGGCGTCATGGTGTCTCATCGTTCGGGGGGA GACTGAAGATACCTTCATCGCTGACCTGGTTGTGGGGCTGTGCACTGGGCAGATCAAGACTGGTGCCCCTTGCCG ATCTGAGCGCTTGGCCAAGTACAACCAGCTCCTCAGAATTGAAGAGGAGCTGGGCAGCAAGGCTAAGTTTGCCGG ${\tt CAGGAACTTCAGAAACCCCTTGGCCAAG} {\color{red}{\textbf{TAA}}} {\tt GCTGTGGGCAGGCAAGCCCTTCGGTCACCTGTTGGCTACACAGA}$ $\verb|CCCCTCCCTCGTGTCAGCTCAGGCAGCTCGAGGCCCCGACCAACACTTGCAGGGGTCCCTGCTAGTTAGCGCC|\\$ ${\tt CCACCGCCGTGGAGTTCGTACCGCTTCCTTAGAACTTCTACAGAAGCCCAAGCTCCCTGGAGCCCTGTTGGCAGCT}$ CTAGCTTTGCAGTCGTGTAATTGGCCCAAGTCATTGTTTTTCTCGCCTCACTTTCCACCAAGTGTCTAGAGTCAT GTGAGCCTCGTGTCATCTCCGGGGTGGCCACAGGCTAGATCCCCGGTGGTTTTGTGCTCAAAATAAAAAGCCTCA GTGACCCATGAG

32/6881 FIGURE 32

MSILKIHAREIFDSRGNPTVEVDLFTSKGLFRAAVPSGASTGIYEALELRDNDKTRYMGKGVSKAVEHINKTIAP ALVSKKLNVTEQEKIDKLMIEMDGTENKSKFGANAILGVSLAVCKAGAVEKGVPLYRHIADLAGNSEVILPVPAF NVINGGSHAGNKLAMQEFMILPVGAANFREAMRIGAEVYHNLKNVIKEKYGKDATNVGDEGGFAPNILENKEGLE LLKTAIGKAGYTDKVVIGMDVAASEFFRSGKYDLDFKSPDDPSRYISPDQLADLYKSFIKDYPVVSIEDPFDQDD WGAWQKFTASAGIQVVGDDLTVTNPKRIAKAVNEKSCNCLLLKVNQIGSVTESLQACKLAQANGWGVMVSHRSGE TEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLLRIEEELGSKAKFAGRNFRNPLAK

33/6881 FIGURE 33

TGGTCCCAAGGCGCGTGCTTTGCAGCAGATGTGTGACCTGGCGTTCCCCTGAGTGCTCGGAAAATGGCCTTGTCT CAGTACTCGGTATGGGAGTCCCAAAAGACAGCTCCAGTTTTACAGGAACCTGGGCAAGTCTGGCCTGCGGGTCTC $\tt CTGCCTGGGACTTGGAACATGGGTGACCTTCGGAGGCCAGATCACCGATGAGATGGCAGAGCAGCTCATGACCTT$ GGCCTATGATAATGGCATCAACCTCTTCGATACAGCAGAAGTCTACGCAGCCGGCAAGGCTGAAGTGGTACTGGG AAACATCATTAAGAAGAAGGATGGAGGCGGTCCAGCCTCGTCATCACCACCAAGATCTTCTGGGGCGGAAAGGC GGAGACGGAGCGGGCCTGTCCAGGAAGCACATAATCGAAGGTCTGAAAGCTTCCCTGGAGCGACTGCAGCTGGA GTACGTGGATGTGGTGTTTGCCAACCGCCCGGACCCCAACACCCCGATGGAAGAGACCGTCCGCCCATGACCCA $\tt CGTCATCAACCAGGGGATGGCCATGTACTGGGGCACGTCACGCTGGAGGTCCATGGAGATCATGGAGGCCTACTC$ CGTGGCCCGGCAGTTCAACCTGACCCCGCCCATCTGCGAGCAGGCTGAGTACCACATGTTCCAGCGTGAGAAAGT GGAGGTGCAGCTGCCGGAGCTGTTCCACAAGATAGGAGTGGGCGCCATGACCTGGTCCCCTCTGGCCTGTGGCAT TGTTTCTGGCAAGTACGACAGTGGCATCCCACCCTACTCAAGAGCCTCCTTGAAGGGCTACCAGTGGCTGAAGGA CAAGATCCTCAGTGAGGAGGGCCGGCGCCAGCAAGCCAAGCTGAAGGAGCTGCAGGCCATCGCCGAGCGCCTGGG CTGCACCCTGCCCCAGCTGGCCATAGCCTGGTGCCTGAGGAATGAGGGAGTCAGCTCCGTGCTCCTGGGGGGCCTC ${\tt CAATGCGGACCAGCTCATGGAGAACATTGGGGCAATACAGGTCCTTCCGAAACTGTCATCTTCCATTATCCACGA}$ CCAGCCTCTCCTCTGCTGAGAATCCCCACTTGGTGTAGGGGGAAAGGGGAAAGGGGTCTGGCCCATCGAGGGGCC $\verb|cttctgccagggccttggttgctggggcagggcctcccacttgggggtcttcctccacctccacttccaccttccacttccacggggtcttcctccacctccaccttcaccttccaccttccaccttcac$ GCTCCAGGAATCTGGGGCCTGACCACAGATTCCTCTCCCATCCTTTTCTGCTCCAACCTGCCCCACTGGGTCCCG GCAGGGGCCATGCCTACCAAGCTCGAGCTGGCCCTTGACCCCCACCCCACCCCTTGCTGGCAGGGGCAGGG ACCCCAGGGGGATTGACTCTGCAGTTTGGGAGCCACAAAAAGCGTAGCGTTGATTTCTAGCTCAGCCTCCCAC CGTCTTCCTCCTACACACCAATGATGAGCCTCATGCCAGTGAGGCCCGGAGCGCTTGGGAGGGGTCCCAGTGGGG ${\tt CAGGCCCTCTGTCTGGCCACCCTCTGTCCTGGCCCCGGAAGGCCCTGTGGTCATGTGCTCCTAGCTGCACGGT}$ GGCTGCTGGCCACACCACGGCAAGTGGCAGCAGGGGCCCGGCCCTGTGCACAAGGATGCACTCCTCTCGGCCCCTG TAGACTTTCTCTAAAGCCGCCCGCCAGCCCAGGCCGCTGCTCTGCACCGAGCTGGTGGGCTTGGGTTTTGTGGAG CGCATGCTTGGACCCTTTCAGTAAGGAAGGGTCTTTGGGGTTTTCTGTGCCCATGACTTGGGGGCTGCACCCCCA CAGCACCCCACAATGTAGGAAAAGACCTCAGGGAACCTCTCCCTGGAAAGACGGGCAGGGCTGGTTAGCCCCTC CCACTGCCTGACACCTGGGACAGGCTGGGCAGAGGGGGAGAGGGCCAGAGTGACGCCCCCGTGCA GCTTGGGCCGGAGGGCAAGGGATGCCAGTAAGTCTGCAGGTGCGGGGTGCCACCTACAGGCCCAGGCCTGTGTCC CAAGCAGTACCCAGGCTTTGCAGACCACGCGGGGCAGGGCTCCACTGAAGCCACCCCCACCCCTCGCCAGCTAGC ${\tt TCCATAGGGAAGCCTGTGTCTCCTGCCCCCAGGGCGCACCCTCAGTGCAGGCACCTCTGTTCCCGCTTTGCCCCT}$ GGAGGAGCCACTATTCCAGAAGGCTCCACCCTGCCGTCCTGCGGGAGCCTGCTGTCCAGTCCTGGCCGGGCCAAG GCCTGGGAAACTGTGAAAGTCAGAAAGGCCAGCGGGGAGAGGGTGGGGGGAGGGGGGAGGGGGATCAGCTTCTG CTATTACCGACCCCCTTCATGCTGCCCCTGGCGCCTAGAACCCTTGCCCCTCATAGACCAAGTCCCGGGGG

34/6881 FIGURE 34

35/6881 FIGURE 35

 ${\tt MAPVKKLVVKGGKKKKQVLKFTLDCTHPVEDGIMDAANFEQFLQERIKVNGKAGNLGGGVVTIERSKSKITVTSE} \\ {\tt VPFSKRYLKYLTKKYLKKNNLRDWLRVVANSKESYELRYFQINQDEEEEEDED} \\$

36/6881 FIGURE 36A

 ${\tt GCCGCGGCGTCCTCGACAACCTATCGAAGGCGCCC} \underline{{\tt ATC}} {\tt GAGCGACCGGCGCCCCTGGCCGTGCTTCCCTTCTCGGA}$ $\verb|CCCCGCGCACGCCTGAGCCTGCGCGGCCTGAGCCAGCTGCGCGCGAGCGCAAGTTCCTGGACGTGACCCT|\\$ GGAGGCGGCGGCGGCCGACTTCCCGGCGCACCGTGCGGTGCTGCCGCCGCCAGCCCCTACTTCCGCGCCAT GTTCGCGGGGCAGCTGCGCGAGAGCCGCCGAGCGGGTGCGCCTGCACGGAGTGCCTCCCGACATGCTGCAGCT GCTGCTGGACTTCAGCTACACGGGCCGCTGGCGGTAAGCGGCGACAACGCTGAGCCGCTGCTGCGCGCCGCCGA CCTGCTGCAGTTCCCGGCCGTGAAGGAGGCGTGCGGGGCCTTCCTGCAGCAGCAGCTCGACCTGGCCAACTGCCT GGACATGCAGGACTTCGCTGAGGCCTTCAGCTGCTCGGGACTGGCGAGCGGCGGCGCGGTTCATTCTGCGCCA CGTGGGCGAGCTGGGCGCCGAGCAGCTGGAGCGGCTGCCACTGGCGCCCTGCTGCGCTACCTGCGGGACGACGG CGCGCACTGGCCGCAGCTGCTGGAGGCCGTGCGCCTTCGTGCGCCGCTTCTACCTGTTGGCGCACGTCGA GGCCGAGCCGCTGGTGGCGCGCTGCCCACCCTGCCGCGCTGCTGCGCGAGGCGCGCGACTTCCAGGCGGCGC $\tt CTACGACCGCCACGGGCCCTGTCCCCGAATGCGTCCTCGCCCGTCCACCGGTCTCGCCGAGATCCTCGT$ GCTCGTGGGCCGCTGCGACCAGGACTGTGACGACTGGTCACTGCTACAACCCGCAGACGGGTCAGTG GCGCTACCTGGCCGAGTTCCCAGACCACCTGGGCGGAGGCTACAGCATCGTGGCGCTGGGCAATGACATCTACGT GACGGGTGGGTCCGATGGCTCCCGGCTCTATGACTGCGTGTGGAGGTACAACTCAAGCGTGAATGAGTGGGCGGA CGACAGCACCGAGCGCTATGACCACCACTGACTCCTGGGAGGCCCTGCAGCCCATGACCTACCCCATGGACAA GTGCTACGACCCGGACACCGACCTGTGGTCGCTGGTGGACTGCGGCCAGCTCCCGCCCTGGTCCTTCGCCCCCAA GACTGCGACTCTAAACGGACTCATGTACTTTGTCAGGGATGACTCCGCTGAGGTGGACGTGTACAACCCGACGAG GAACGAATGGGACAAGATCCCGTCCATGAATCAGGTAAATTTTCAGGCGGGCCAGCATTGGAAGCACAGGCTGGT T<u>TAA</u>TAGAAGGCTGCTCTTACCCTTATTTTGCACTTAAGGCTCACTGAGACACAGATGTTAAGTAATACCCTATG GGAGCAAGGCATACAGTCATCTGGGGACACCTGTTCCAGAGAGGGACAGCAGGTACAGAGGCCCTGCAGCAGGGC TTTTTATTTTTGAGACAGGGTCTTGCTCTGTCACCCAGGCTGGAGTGCAGTGGTACAATCATGGCTCACTGCAGC CTCCACCTCCTTGACTCGCAGTCCTCCCACCGCACCTTCCTGAATAGCTGAGACTACAGGCGTGTGCCACCACAC CCAGTAATTTTTTTCTCATATGTAGATACAAAAGGATATTCTTAAAATTTTTATAGAGACAGGGTCTTGCTGTG TTACCCAGGCTGGTCTCACACTCCTGGCCTCAAGTGACCCTCCTGTCTCAGCCTCCCAAAGTGCTAGGATTATAG TTTTTAGTAGAGACGGGATTTCACTGTTTAGCCAGGATGGTCTGGATCTCCTGACCTTGTGATCTGCCTGGCTC AGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCATGCCCAGCCCACTGTGGGAATACTTGTGTTGAGCAC TTGCTGTGTTCTGAATAGGACAACCAGGGTCCACCCCTTCTCTCTGGGCTTGTTGAGAAGAGGGGTGCCCAGC CTGACAGTGATGGGACAGGGAGGCTTCAGTGCCATTTGGCCATGTGAGCAGTGTTAGTCTGAGGTACACATCATA TTGCCTACAGCCTTCTTTCCTGTGTGTCTGTTAACATTTCCAAACCTACACTCCGTGACATCCAGCCTCACAGCT TACATCACAGCTTAATGTCCTGGCATTTAAGAGACCCAGCGTTCTGTTTTCCCCGCAGTAAGCTGCACATAGTCA TAGCGAATTTGGGAAAGATGGAAGGAATCATCCAGCCTCGCGGTTCAGAGCCCAGCTCTGCCACTGTCAGCCATG CAAGCCTCAGTTTTCCCATCTGTAACATGGGGAGAACAGCACTGCTCAGCCCAGAGGGCCACTGCAGAGATTCTG ACCATAGGGAAGGCCCAGCTGCCTCCGGGGAGGCCCGTTCTCCTAGGCAGGGTGTTGGAAAGGGGTTGGCCTCTC TGCTGCTTTCTGGGAGAGCCAAGGCCACCCCTCTGGGGTACTGACAGGGCATGCCTTGTCTCCAGTGGTTCCCCA GGTGGGGCCCTGCCCTCTCCTCTGACCTCCACTCACTCATCCCTTTGGCCCACAGGTACATGTGGGGGGC AGCCTGGCCGTCCTTGGGGGAAGCTGTACGTCTCTGGGGGGATACGACAATACATTTGAACTCTCGGACGTGGTA

37/6881 FIGURE 36B

GAGGCCTATGACCCAGAGACTCGCGCGTGGAGCGTGGTGGGGGGCGCTCCCAGAACCCACCTTCTGGCATGGCAGT GTCAGCATCTTCCGCCAGTTCATGCCCCAGACCTTCTCGGGTGGGCGTGGCTTCGAGTTGGACAGTGGCAGCGAT ${\tt GACATGGACCCAGGCCGACCCGGGGGACCCCGATGAGCTGCACTAGCCCCAGTCTGGCCCGGCACGG}$ GCCTCGGTGCAGGTAACTGGCACCTCTGCGGGGCAGTGCCCCACTCCTTTGTGCACAAGGACACGTTGGGCTCAC AGGAGGAGCACAGGCTCTTGGGTGGCGAAGCCAGCCCAGGATCCATTACCTGGAAGGTTTCTGTACCTTGAGAGC CTGAATCAGAGGCCGTCGGGAACGCCCTCCCTGCAGTTGAGGAAGAGCCACTTTCCTGCCAGCACATGTTTCTGG GTCTTGGAGGTCACCCCCACCCGGGGATCACAGCTCACCCACGCGGGGGCACACCCCTCCTGCCGTTGTCATCTG AGGCTGAGGATGGCCTGAACCTGGAGCAGCCGGACCAGGCAGACGGGCTGAAGTGGGGTCCCAAATTCCATGTCCA GAGGTGTGGGGAGCCTGCCTAGCTCCTGGCCCCTGCCAGGGGCTTACATCAAAACACCTCAGAGGGCTGCC CTCCAGAGGCTGCACCCAGAACAGTGGGACATGAGCAGGGGTGTGGGCTTGGAGGGTGAAGAGATGTGGTCCTA $\tt CTCTCCTTCCCGGGAGGCCCTGGGAGGTGATCATTGACACCCAGCCAAGCAGCAGCAGCTGCGGGTGCCCAAGCCCT$ CCAAAGTTGAAAATGCTTGCAGTTTGACCTTAGAAGAAGTGGGAAGAAGAAGGAGCTCTACAGGGTCAGCTTTGT TTGATTTGTCCAGTCTAAGAAGTCCCATTGCCAAAGCTTTCTGCAGGAGGGTGAATGCCGCAGCTTGGCAGCCCC TGGGTTTCTCTTGGAAATGGTCAGTTTCCCCTCAAAGTACCCAAAGTAGCCTTGGCTTGAGTTTTTGTCCTTGCC TCCTTTTTAGAGAAGAGGCATTTAGACTGCATTTTCCTGGTTAAAGAAGGTTAAAGCAAATGTTTATTGCCTTT TCTAGTGAACTAACTCGTAGAGATGTTCTCAGCAGGAAGACAGTCTTAGCACTGTCACTTAGCAGATTGCACTTA AGTCCCTTGTGCTGGCCAGATGGCGTGGCTGGTTGCCTTAATATGTCCCAGGACCCCTGACAGGGCTGCCTGGCC TCTCCCTCGTGCTCCTCAAGAGCCCAGTCCATACACTGTGGATGTCATTGCTGTCGGGTTAGGAAGTCTTGTCCT AGAACGCCCTGGCTGGTATGACCACAGTTCATGGCGGCTCTTCTCGCTTGGGTCATGGTCATCTTCCAGCACCTG TTTCCTGCCCTTCTCCTCTCCTCCCTTGGGGCTACCCCTTGGCCCCTCCTGGTCTGTGCAAACTCCCTCAG GCGGGGCAGCTTGTCTCCCTTGTCAGCAGGGGCGTAAGGGCTGGGTTTGGCCATACAAGGTTGGCTACGCCCTCA ATCCCTGACCGTTCCAGGCACTGAGCTGGGCACCCACGGAAGGACATGCTGTCCAGACTGTGATGACTGCCAGCA ${\tt CAGGGCATCTCGGGCTTGGCTGGTCTGCGAGGCCTTGCCCCTGTGGAACTCTGGGTTCCTGTTTTCTCAGTCTTT}$ TTTGCGGCTTTGCTGTGGTTGGCAGCTGCCGTACTCCAGGCTTGTGTCGGCCACTCAGATGAGGGCTGTGGTGCG ${\tt CATCAGGACCCTGTCTTTGGGTTTAGAAGACCAAGTATGGGGAAAACCAGGCACCAGCCTCTGCAGCAATGGGTC}$ CCTCTAGCCTGTGGACACCAGCTGGGGGATCCAGGGTCAGGCCCCCTCCTCTCCCCAGTTTCCCTCTGCTGTGGG TTCTGGGCTGTCATGTCTCCACCACTTAAGGATGTCTTTACACTGACTTCAGGATAGATGTTGGGATGCCTGGGC ATGGCCACATGTTACATGTACAGAACTTTGTCTACAGCACAAATTAAGTTATATAAACACAGTGACTGGTATTTA ATGTCCAGAATCCTGCTTAAGGTTTTAGGGTACCTTCAGTACTTTTTGCAATAAAAGTATTTCCTATCCATTTGG

38/6881 FIGURE 37

MERPAPLAVLPFSDPAHALSLLRGLSQLRAERKFLDVTLEAAGGRDFPAHRAVLAAASPYFRAMFAGQLRESRAE RVRLHGVPPDMLQLLLDFSYTGRVAVSGDNAEPLLRAADLLQFPAVKEACGAFLQQQLDLANCLDMQDFAEAFSC SGLASAAQRFILRHVGELGAEQLERLPLARLLRYLRDDGLCVPKEEAAYQLALRWVRADPPRRAAHWPQLLEAVR LPFVRRFYLLAHVEAEPLVARCPPCLRLLREARDFQAARYDRHDRGPCPRMRPRPSTGLAEILVLVGGCDQDCDE LVTVDCYNPQTGQWRYLAEFPDHLGGGYSIVALGNDIYVTGGSDGSRLYDCVWRYNSSVNEWAEVAPMLKAREYH SSSVLDGLLYVVAADSTERYDHTTDSWEALQPMTYPMDNCSTTACRGRLYAIGSLAGKETMVMQCYDPDTDLWSL VDCGQLPPWSFAPKTATLNGLMYFVRDDSAEVDVYNPTRNEWDKIPSMNQVNFQAGQHWKHRLVLILQPKCHRDE CLGSTAMMDGSHLN

39/6881 FIGURE 38A

ACACCGGGGCCGCCGCGGAGCCTCATGGGGGTTGGAGTCCCCAAGGTTTCCTTTGTGCGCAGTATTGGCGGG CCACCCAGACTACATTTCCCGACAGGCCTCCCGGCTCTCCCGCCCTCCCGAGACACGAGCCGAACTGGGCG TCAGGTCGGGGAGCCGGTCGGGTTCCCGCTCACCGCCGCCGCCGCCCCCTGCAGCCACTCTCCCGCCTCTAC CGCCGCGGGAGCTGCATCGTCCACTCCGGTCGGCGGTGGAACCGCCAGTCCGGGGTCACAGAGCTTGAGAAGCGA CGCGCTGAGCCCCCATCACCTCCAGCCCGGGCGACCCCTCCCGGGTCCGCCCTCGCCCTGCGCAGCCGCCCGAG ACATGGACTCTGACTCTTGCGCCGCCGCCTTCCACCCGGAGGAATACTCCCCCAGTTGCAAGAGGCGCAGGACCG TGGAAGACTTCAACAAATTCTGCACCTTTGTCTTGGCCTATGCTGGCTACATCCCTTATCCGAAGGAGGAACTCC CTTTAAGGAGCAGCCCCAGCCCTGCTAACAGCACTGCTGGTACCATTGACAGCGACGGCTGGGACGCGGGTTTCT CAGACATCGCGTCCTCAGTGCCCTTGCCAGTCTCTGACCGCTGCTTTAGCCACCTGCAGCCTACTCTCTTGCAGC GAGCCAAGCCCAGTAACTTCCTGCTGGACAGAAAGAAAACGGACAAGCTGAAGAAGAAGAAGAAGAAGAAGCGCA AGACCCCCACGAGTCCCACCTTGCAGGATATCCCCCAGGCTCCCAGCGACCCCTGCTCGGGCTGGGACTCCGATA CTCCCTCGAGTGGATCTTGTGCCACTGTGTCACCTGATCAGGTCAAAGAAATAAAAACTGAAGGCAAACGGACTA TCGTCCGGCAGGGAAAGCAGGTGGTGTTCCGAGATGAGGACAGCACTGGCAATGATGAGGACATCATGGTGGACT ATGAGTGCCACACCTGGATTCACCTGTCCTGTGCGAAAATCCGGAAATCCAATGTTCCAGAAGTGTTTGTCTGCC AAAAGTGCCGGGACTCCAAGTTTGACATCCGCCGTTCCAACCGCTCGCGGACGGGCTCCCGGAAGCTGTTCCTGG TTGAGCACAGAACCCTCAGCTCTGGTGCGGGCAGATCCCTGCCATTTAGGTGCCTAAGCAAAAGGACAGGCTGTC CTGCAGTGGAGGTGGACTGGACACCCACGTGCAGCGGGTTTGGCTCATTTGAAAATGAGGGTCCGTGGTAGCTGT GCGTTTTGCTATCATTGCTAAGAGATTCCCGCTGATTGGGCTCAGTGCCAGCTGTTATTCTGCTTCCACTGTGTT GGGGAGAGGTGTTCGCCCAGCCTGTTAATGAACAGCCATACGTGTAAGCTTTTTCTTGAGTGTTAAGTCT TTTACCAAAAGTGTCTGTACAGCAGCCATCCAAGTTGCCCCTACTTAGTGGCTTGCCCTCTGCCTCAGCTG CTGGTGGTTCTTAGGTTTCCTTCTGTTTGTTAAAAGGGACAATGTGGCCACTTCTCTGTGGAAAGGGAGTTGGTT GGGGGGTTGAGATGGCCCGTGTTCATAACTCAGTTTCCTGTTTTGCACGATGTAAAAACCCTGTCTTTTTGCACG ATACAGCCAAAAGTATTGGCTGATTTCTTGCTGAGTGCCCTCTTAGTTGGTGTGAGGTCTTGGTGGGCTCAGG ${\tt CCAGCTGTTTGCGAGTGTGGGAACTCATAGGTTCTGTCTTTGTCTTTCTCTTTCACCTCATTCTGGTAGCAGCAT}$ TCTCCGTTGGGTGACTCTTGTGTGCCCTTTAGACAGGCTGGCCTGCCGGTTCCACAGGGTACAGTTAGGACTTGA GTCTTTCTTTTTCTGTTTTGAGTTGGTGAGTGAGTGATAGGGTAACATGGGCCTTCAGGATGACCCCTTGGAACT GTGCCGAGTTCCTTAAATCTCAGCTGGGATCCTGGACCTGGGAGGCCCCTGTGAGGGCCCAGCTCTGGAAAAACCT GGGAGTTGATGCCGGAGGCTGTGGAAGAACTCTGCTCGAGGGCAGGGTGCCCTGGAACACTGGTAGTTCTGGGGC TGGGAGGGAGGGGCTCCGGCTTTCTCTGAAATGAACACTGCTCTTCAGCAGTTCAAGTACTTGTTCTCAAAAC TCATGTTTGTTTTCAGTGGGATGGGCCCGCGTTCTCACTGCTGGGGGCTTCCCCTTCATGTGGCACCTTTGTGCC AGGCCACCAGGCAGACTCTTCCCACCTTCTCCCACTGAAGCACCAAGGGGCTTGAACCGTAATTTGGCTAATCAG AGGCATTTTTTTTGTCCTAGTATCTTTCACACTTGTCCAACCGTCTTATTTTTTTAAAAGTTCTGTTGCTTGTAT TAACACGAAACTAGAGAGAAATAGTTTCTGAAGCCAGTTTATTGTGAAGATCCCCAAGGGGGGAGGTTCGGTAGAG AAAAATAGTAAGCTGGTTTAGAAACTGACGAGGGCAAACAGCCAGGACGCATTGGAGAGGAATTTGCCAAAGATC TACCCTGAGATAACGCCTGTCCAGTGTCTTCACCACGTGAATAACCAGCGCTCCAAAGTGTTTTTCTGCTTTGAA AAAAAAAATTCCACAAGCTTTTAAAGGTGCATTTAAGAATCCATGTGACTTTAGAATGGAACTGCCGGCCCTGG CAACTGTCACGTGTGCTAGAAGGTTCGATGCCTCTGGAATGCATGTGATACTCATCTCCATTTTGTTTCCTTGAT

40/6881 FIGURE 38B

FIGURE 39

MDSDSCAAAFHPEEYSPSCKRRRTVEDFNKFCTFVLAYAGYIPYPKEELPLRSSPSPANSTAGTIDSDGWDAGFS DIASSVPLPVSDRCFSHLQPTLLQRAKPSNFLLDRKKTDKLKKKKKRKRRDSDAPGKEGYRGGLLKLEAADPYVE TPTSPTLQDIPQAPSDPCSGWDSDTPSSGSCATVSPDQVKEIKTEGKRTIVRQGKQVVFRDEDSTGNDEDIMVDS DDDSWDLVTCFCMKPFAGRPMIECNECHTWIHLSCAKIRKSNVPEVFVCQKCRDSKFDIRRSNRSRTGSRKLFLD

42/6881 FIGURE 40

GACGGCTCCGGGCCGCCAGGGGCCGCTGTGGCCGAGCCGGGCTGGCCCGCGCTGTCCCTGACGCGGATCACTGGC CCCTCTTGAGCACGGCCTTGCCGGTTTGGCGGGGTGAAAGGTTGCGAAGATGGCGACGGCCTTGAGCGAGGAGGA GCTGGACAATGAAGACTATTACTCGTTGCTGAACGTGCGCAGGGAGGCCTCTTCTGAAGAGCTGAAAGCTGCCTA $\verb|CCGGAGGCTCTGTATGCTCTACCATCCAGACAAGCACAGAGCCCAGAGCTCAAGTCACAGGCGGAACGACTGTT| \\$ AGGACTGGAAATGGAAGGATGGGAGGTTGTGGAAAGGAGGAGAACCCCTGCTGAAATTCGAGAGGAGTTTGAGCG GCTGCAGAGAGAGAGAGAGAGAGAGAGTTGCAGCAGCGAACCAATCCCAAGGGAACGATCAGCGTTGGAGTAGA TGCCACCGACCTTTTTGATCGCTATGATGAGGAGTATGAAGATGTGTCCGGCAGTAGCTTTCCGCAGATTGAAAT CTCAACCCAGAATGGAAATGGAGGGTTCCATTAACTTTGCGCTCAGACGAGTAACTTCGGCAAAGGGATGGGG AGAGTTGGAATTTGGAGCTGGAGACCTACAGGGGCCTTTGTTCGGTCTCAAGCTGTTCCGTAATCTCACACCAAG ATGCTTTGTGACAACTGTGCTCTGCAGTTTTCATCCCGTGGAATCCGACCCGGCCTGACCACTGTCCTAGC TCGGAACCTAGACAAGAACACCGTGGGCTACCTGCAGTGGCGATGGGGTATCCAGTCAGCCATGAACACTAGCAT CGTCCGAGACACTAAAACCAGCCACTTCACTGTGGCCCTGCAGCTGGGAATCCCTCACTCCTTTGCACTGATCAG CTATCAGCACAAATTCCAAGATGACGATCAGACTCGTGTGAAAGGATCCCTCAAAGCAGGCTTCTTTGGGACGGT GGTGGAGTACGGAGCTGAGAGGAAGATCTCCAGGCACAGCGTTTTGGGTGCAGCTGTCAGCGTTGGAGTTCCACA GGGTGTTTCTCTCAAAGTCAAGGCTCAACAGGGCCAGTCAGACATACTTCTTCCCTATTCACTTGACGGACCAGCT TCTGCCCAGCGCCATGTTCTATGCCACCGTGGGGCCTCTAGTGGTCTACTTTGCCATGCACCGTCTGATCATCAA ACCATACCTCAGGGCTCAGAAAGAAGGAATTGGAGAAGCAGAGGGAAAGCGCCGCCACCGATGTGCTGCAGAA GAAGCAAGAGGCGGAGTCCGCTGTCCGGCTGATGCAGGAATCTGTCCGAAGGATAATTGAGGCAGAAGAGTCCAG AATGGGCCTCATCATCGTCAATGCCTGGTACGGGAAGTTTGTCAATGACAAGAGCAGGAAGAGCGAGAAGGTGAA GGTGATTGACGTGACTGTGCCCCTGCAGTGCCTGGTGAAGGACTCGAAGCTCATCCTCACGGAGGCCTCCAAGGC TGGGCTGCCTGGCTTTTATGACCCGTGTGTGGGGGAAGAAGAACCTGAAAGTGCTCTATCAGTTCCGGGGCGT CCTGCATCAGGTGATGGTGCTGGACAGTGAGGCCCTCCGGATACCAAAGCAGTCCCACAGGATCGATACAGATGG ATAAACTGCCAAGAACCAGATTTTTAAAAGGCCGCAAAAAATCTTTTCCTGGGAGTCTACAAATTTGGAAATGAA AAAACCCAGACATCAGATGTTTTTATTTTATTTATTATTATAGAAGGTGGTACCATTATCAATTATGTGAAGGG ACATGCAGACACCCCAGCTTTTGAGGGTGCTGGGGGTAGGACTGAGGCAGCCCCACTGGGAACCAGACTGCAGCC TGGCCCATGGCTGTTTTCCCAAGGATCAGTTCCTGGAGGGAAGGGCTCTGGCCCTGACTCCGCTGTCCCCGAGC GTCAGGGAGCCTCTGCTGTGCTGGCTTCCCATGACCACCTCCTCTTGCTGAAATATTACTGCTTGAATCTGGAGC AGATTGCGGGTTTATAAAACTGCTTTTTATCTGAGAACAACGGGTTTGGAAATTAGTCGTCTTTTTTCCCCACT ${\tt CCCAGAGCTGCTCAAGTCATTCCACCGGCCCCCTCGGCTTGGGACAGGGTAGTGTAACTCCCGATCCCAGGGCCT}$ AGCCCTGACACAGGTGGCTTCCCGTATCCCGGTGGGAAAACGCCCTGCCACCAGCGGGCTTGAGCTGGCCTGTGT CCCTCCACCGCCTGCACCACCCCCCCAGAGTGCAGTGCTGGGCAAGGGCAGCTCAAGAGGACAGGACCAGGCG CTTGGCAAGACATCAGACACCCAACCCAAAGGCGTGGACCCCAGGCCCGGCCCGTGGTACCCAGCAGGTGGCA ACCCTTCCTCCACGTGCCCACTTGGGATGCAGAATGCAGCGGGGCTAGGACCCCCTCCACGGCCTGGACCTCGGC TGCAGTAAAGTTACGTGAGGCCTGTCTCTCGGGGCCTGGAAGTGGCAGCCATCAGTTGCTCTTGCTGACCCCTCG GTTTTGAAAAGCAGTTCGGGTTGTCCAATTCTGTAACATTCATCTCCATTTTTTAAAAAGGTTTCTCTGACGGCC CCACGGCCCGAGCCGCGTGAGCGTCGTGTTGCATGAGCCTCGGGCCCCGGGCTTCCCGTGCGCCTCTGCCGCAGG TGCTTCTGGGCACCCATCCTCTGCGTTTCATTTGCAGTCGACTGTACAGAAGGCACTCACCACAATAAACCTTTC CTGAAAGC

43/6881 FIGURE 41

TGCGAGGCAGAGTGCTAGCGGGAGCCGAGCCAGCAAGAGGCGCCTGCGCGATGTCCGGGCCCCTGAGCCCGCGG CGCTGAGCCAGCCGGGACGGACATGCGCGGGGAGGGCGCCGCGGGGGCAGCCGCCGCTCCTCCGGGGGAATGAAAGC TACTGGTTGATTTTAAAGTGCCTGGGCCTCACAGGTTTGGAGATGTCCCAGAATAAGGCACAATGTCAATAGCAG GAGTTGCTGCTCAGGAGATCAGAGTCCCATTAAAAACTGGATTTCTACATAATGGCCGAGCCATGGGGAATATGA GGAAGACCTACTGGAGCAGTCGCAGTGAGTTTAAAAACAACTTTTTAAATATTGACCCGATAACCATGGCCTACA ${\tt GTCTGAACTCTTCTGCTCAGGAGCGCCTAATACCACTTGGGCATGCTTCCAAATCTGCTCCGATGAATGGCCACT}\ .$ GCTTTGCAGAAAATGGTCCATCTCAAAAGTCCAGCTTGCCCCCTCTTCTTATTCCCCCAAGTGAAAACTTGGGAC CACATGAAGAGGATCAAGTTGTATGTGGTTTTAAGAAACTCACAGTGAATGGGGTTTGTGCTTCCACCCCTCCAC TGACACCCATAAAAAACTCCCCTTCCCTTTTCCCCTGTGCCCCTCTTTGTGAACGGGGTTCTAGGCCTCTTCCAC CGTTGCCAATCTCTGAAGCCCTCTCTCTGGATGACACAGACTGTGAGGTGGAATTCCTAACTAGCTCAGATACAG ACTTCCTTTTAGAAGACTCTACACTTTCTGATTTCAAATATGATGTTCCTGGCAGGCGAAGCTTCCGTGGGTGTG GACAAATCAACTATGCATATTTTGATACCCCAGCTGTTTCTGCAGCAGATCTCAGCTATGTGTCTGACCAAAATG GAGGTGTCCCAGATCCAAATCCTCCTCCACCTCAGACCCACCGAAGATTAAGAAGGTCTCATTCGGGACCAGCTG GCTCCTTTAACAAGCCAGCCATAAGGATATCCAACTGTTGTATACACAGAGCTTCTCCTAACTCCGATGAAGACA AACCTGAGGTTCCCCCAGAGTTCCCATACCTCCTAGACCAGTAAAGCCAGATTATAGAAGATGGTCAGCAGAAG TTACTTCGAGCACCTATAGTGATGAAGACAGGCCTCCCAAAGTACCGCCAAGAAACCTTTGTCACCGAGTAACT CGCGCACACCGAGTCCCAAAAGCCTTCCGTCTTACCTCAATGGGGTCATGCCCCCGACACAGAGCTTTGCCCCTG ATCCCAAGTATGTCAGCAAGCACTGCAAAGACAGCAGCGAAGGATCTGCCAGTAAGGTTCCTTGCATTC TGCCCATTATTGAAAATGGGAAGAAGGTTAGTTCAACACATTATTACCTACTGAACGACCACCATACCTGG ACAAATATGAAAAATTTTTTAGGGAAGCAGAAGAAACAAATGGAGGCGCCCAAATCCAGCCATTACCTGCTGACT GCGGTATATCTTCAGCCACAGAAAAGCCAGACTCAAAAACAAAAATGGATCTGGGTGGCCACGTGAAGCGTAAAC ATTTATCCTATGTGGTTTCTCCTTAGACCTTGGGGTCATGGTTCAGCAGAGGTTACATAGGAGCAAATGGTTCTC AATTTTCCAGTTTGATTGAAGTGCAGAGAAAAATCCCTTAGATTGCAAAATAAAATAGTTGAACTCTCTGTCTTC ATGTGGAAGGTTTAGAGCAGTTGTGAGATGCTGTTATGCTGAGAAACCCTGACTTTGTTAGTGTTGGAAAAAAGT CATACCTATATATAAACTTGTGGTATAACCATAGACCATAGCTGCAGGTTAACCAATTAGTTACTATCGTAGAGT AATATATTCAGAATAATAAACTCAAGCTGGAGAAATGAGTCCTGATAGACTGAAAATTGAGCAAATGGAAGAA GATACAGTATTGTTTAGATCAGAATCATTAAAAAATATTTTTGTTTAGTAAGTTTGAAGATTTCTGGCTTTTAGG CCTTTTCTATTTTGTTCCATTTATTTTTGCAGGCAATCTTTTCCATGGAGGGCAGGGTATCCATTCTTTACCATG GGTGTACCTGCTTAGGTTAAAAATCATACCAAGGCCTCATACTTCCAGGTTTCATGTTGCGTCTTGTTGAGGGAG GGAGAGCAGGTTACTTGGCAACCATATTGTCACCTGTACCTGTCACACATCTTGAAAAATAAAACGATAATAGAA TAGAAGCAGTGGGGTACGTTAGACTCAGATGGAAAAGTATTCTAGGTGCCAGTGTTAGGATGTCAGTTTTACAAA AGACTGTATTAATAAACATACAACACAAGCTGGCCTTGTGTTGCTGGTTCCTATTCAGTATTTCCTGGGGATTGT TTGCTTTTTAAGTAAAACACTTCTGACCCATAGCTCAGTATGTCTGAATTCCAGAGGTCACATCAGCATCTTTCT GCTTTGAAAACTCTCACAGCTGTGGCTGCTTCACTTAGATGCAGTGAGACACATAGTTGGTGTTCCGATTTTCAC ATCCTTCCATGTATTTATCTTGAAGAGATAAGCACAGAAGAGAGGTGCTCACTAACAGAGGTACATTACTGCAA TGTTCTCTTAACAGTTAAACAAGCTGTTTACAGTTTAAACTGCTGAATATTATTTGAGCTATTTAAAGCTTATTA TATTTTAGTATGAACTAAATGAAGGTTAAAACATGCTTAAGAAAAATGCACTGATTTCTGCATTATGTGTACAGT ATTGGACAAAGGATTTTATTCATTTTGTTGCATTATTTTGAATATTGTCTTTTCATTTTAATAAAGTTATAATAC **ТТАААААААААААААААААА**

FIGURE 42

45/6881 FIGURE 43

MASKRALVILAKGAEEMETVIPVDVMRRAGIKVTVAGLAGKDPVQCSRDVVICPDASLEDAKKEGPYDVVVLPGG NLGAQNLSESAAVKEILKEQENRKGLIAAICAGPTALLAHEIGCGSKVTTHPLAKDKMMNGGHYTYSENRVEKDG LILTSRGPGTSFEFALAIVEALNGKEVAAQVKAPLVLKD

46/6881 FIGURE 44

47/6881 FIGURE 45

 ${\tt MSTGPTAATGSNRRLQQTQNQVDEVVDIMRVNVDKVLERDQKLSELDDRADALQAGASQFETSAAKLKRKYWWKNCKMWAIGITVLVIFIIIIIVWVVSS}$

48/6881 FIGURE 46

GGTCTGTGCTTTTAATAGGACTGTCTCCAAAGTTGATGATTTCTTGGCCAATGAGGCAAAGGGAACCAAAGTGGT ${\tt GGGTGCCCAGTCCCTGAAAGAGATGGTCTCCAAGCTGAAGAAGCCCCGGCGGATCATCCTCCTGGTGAAGGCTGG}$ GCAAGCTGTGGATGATTTCATCGAGAAATTGGTACCATTGTTGGATACTGGTGACATCATCATTGACGGAGGAAA TTCTGAATATAGGGACACCACAAGACGGTGCCGAGACCTCAAGGCCAAGGGAATTTTATTTGTGGGGAGCGGAGT CAGTGGTGGAGAGGGAAGGGCCCGGTATGGCCCATCGCTCATGCCAGGAGGGAACAAAGAAGCGTGGCCCCACAT ${\tt AGCAGGCCACTTCGTGAAGATGGTGCACAACGGGATAGAGTATGGGGACATGCAGCTGATCTGTGAGGCATACCA}$ AGACTCATTCCTGATTGAAATCACAGCCAATATTCTCAAGTTCCAAGACACCGATGGCAAACACCTGCTGCCAAA GATCAGGGACAGCGCGGGCAGAAGGGCACAGGGAAGTGGACCGCCATCTCCGCCCTGGAATACGGCGTACCCGT CACCCTCATTGGAGAAGCTGTCTTTGCTCGGTGCTTATCATCTCTGAAGGATGAGAAAATTCAAGCTAGCAAAAA GCTGAAGGGTCCCCAGAAGTTCCAGTTTGATGGTGATAAGAAATCATTCCTGGAGGACATTCGGAAGGCACTCTA $\tt CGCTTCCAAGATCATCTCTTACGCTCAAGGCTTTATGCTGCTAAGGCAGCCACCGAGTTTGGCTGGACTCT$ CAATTATGGTGGCATCGCCCTGATGTGGAGAGGGGGGCTGCATCATTAGAAGTGTATTCCTAGGAAAGATAAAGGA TGCATTTGATCGAAACCCGGAACTTCAGAACCTCCTACTGGACGACTTCTTTAAGTCAGCTGTTGAAAACTGCCA GGACTCCTGGCGGCGGCAGTCAGCACTGGGGTCCAGGCTGGCATTCCCATGCCCTGTTTTACCACTGCCCTCTC CACCTATGAACTCTTGGCCAAACCAGGCAGTTTATCCACACCAACTGGACAGGCCATGGTGGCACCGTGTCATC CTCGTCATACAATGCCTGATCATGCTGCTCCTGTCACCCTCCACGATTCCACAGACCAGGACATTCCATGTGCCT CATGGCACTGCCACCTGGCCCTTTGCCCTATTTTCTGTTCAGTTTTTTAAAAGTGTTGTAAGAGACTCCTGAGGA AGACACACAGTTTATTTGTAAAGTAGCTCTGTGAGAGCCACCATGCCCTCTGCCCTTGCCTCTTGGGACTGACCA GGAGCTGCTCATGTGCGTGAGAGTGGGAACCATCTCCTTGCGGCAGTGGCTTCCGCGTGCCCCGTGTGCTGGTGC GGTTCCCATCACGCAGACAGGAAGGGTGTTTGCGCACTCTGATCAACTGGAACCTCTGTATCATGCGGCTGAATT CCCTTTTTCCTTTACTCAATAAAAGCTACATCAGACTG

49/6881 FIGURE 47

MAQADIALIGLAVMGQNLILNMNDHGFVVCAFNRTVSKVDDFLANEAKGTKVVGAQSLKEMVSKLKKPRRIILLV KAGQAVDDFIEKLVPLLDTGDIIIDGGNSEYRDTTRRCRDLKAKGILFVGSGVSGGEEGARYGPSLMPGGNKEAW PHIKTIFQGIAAKVGTGEPCCDWVGDEGAGHFVKMVHNGIEYGDMQLICEAYHLMKDVLGMAQDEMAQAFEDWNK TELDSFLIEITANILKFQDTDGKHLLPKIRDSAGQKGTGKWTAISALEYGVPVTLIGEAVFARCLSSLKDERIQA SKKLKGPQKFQFDGDKKSFLEDIRKALYASKIISYAQGFMLLRQAATEFGWTLNYGGIALMWRGGCIIRSVFLGK IKDAFDRNPELQNLLLDDFFKSAVENCQDSWRRAVSTGVQAGIPMPCFTTALSFYDGYRHEMLPASLIQAQRDYF GAHTYELLAKPGQFIHTNWTGHGGTVSSSSYNA

50/6881 FIGURE 48

CGCCGCTCCGGCCTCCCGCGACTTCTCGAAGGTGGGCAGGTCCCACCTTGTGGAGGATGGAGGTGACCGGGGACG CCGGGGTACCAGAATCTGGCGAGATCCGGACTCTAAAGCCGTGTCTGCTGCGCCGCAACTACAGCCGCGAACAGC ACGGCGTGGCCGCCTCCTGCAAGACCTGAGGAGCAAGGCCTGTGACATTCTGGCCATTGATAAGTCCCTGA ${\tt CACCAGTCACCCTTGTCCTGGCAGAGGATGGCACCATAGTGGATGATGACGATTACTTTCTGTGTCTACCTTCCA}$ ATACTAAGTTTGTGGCATTGGCTAGTAATGAGAAATGGGCATACAACAATTCAGATGGAGGTACAGCTTGGATTT CCCAAGAGTCCTTTGATGTAGATGAAACAGACAGCGGGGCAGGGTTGAAGTGGAAGAATGTGGCCAGGCAGCTGA ${\tt AAGAAGATCTGTCCAGCATCATCCTCCTATCAGAGGAGGACCTCCAGATGCTTGTTGACGCTCCCTGCTCAGACC}$ TGGCTCAGGAACTACGTCAGAGTTGTGCCACCGTCCAGCGGCTGCAGCACACACTCCAACAGGTGCTTGACCAAA GAGAGGAAGTGCGTCAAGCAGCTCCTGCAGCTGTACCTCCAGGCTTTGGAGAAAGAGGGCAGCCTCTTGT ${\tt CAAAGCAGGAAGAGTCCAAAGCTGCCTTTGGTGAGGAGGTGGATGCAGTAGACACGGGTATCAGCAGAGAGACCT}$ CCTCGGACGTTGCGCTGGCGAGCCACATCCTTACTGCACTGAGGGAGAAGCAGGCTCCAGAGCTGAGCTTATCTA GTCAGGATTTGGAGTTGGTTACCAAGGAAGACCCCAAAGCACTGGCTGTTGCCTTGAACTGGGACATAAAGAAGA GGAGCATCTCAGCAAGCCAAGGCCTCACCACCTGGTGACCTGCAGAATGCTAAGCGAGCCAGACAGGATCCCACA<u>T</u> <u>AGCAGCAGCGGGAAGTGTGCCAAGGAAGCTCTGTGGCGTTGTTGTTATTGGTAGACACCCTCAGCCTCATCATTTG</u> ACTACCTATGTACTACTCTACCCCTGCCTTAGAGCACCTTCCAGAGAAGCTATTCCAGGTCTCAACATACGCCG TTCCACCAATTTTTTTTTTAGCCCCACCAGCTTCAGGACTTCTGCCAATTTTGAATGATATAGCTGCACCAACAA TATCCCGCCTCCTAATTACATATGATGTTCTCTGTTCAAAAGTAATTGGCAGTGATTGGCCAGGCGCAGTGGC AGCTACTTGGGAGGCTGAGGCAGGAGATGGCATGAACCTGGGAGGCAGAGCTTGCAGTGAGCTGAGATTGCGCC

FIGURE 49

MEVTGDAGVPESGEIRTLKPCLLRRNYSREQHGVAASCLEDLRSKACDILAIDKSLTPVTLVLAEDGTIVDDDDY FLCLPSNTKFVALASNEKWAYNNSDGGTAWISQESFDVDETDSGAGLKWKNVARQLKEDLSSIILLSEEDLQMLV DAPCSDLAQELRQSCATVQRLQHTLQQVLDQREEVRQSKQLLQLYLQALEKEGSLLSKQEESKAAFGEEVDAVDT GISRETSSDVALASHILTALREKQAPELSLSSQDLELVTKEDPKALAVALNWDIKKTETVQEACERELALRLQQT QSLHSLRSISASKASPPGDLQNPKRARQDPT

52/6881 FIGURE 50

GACCTGCAGCCTGTGGCCCGGCCAGGCCCTGTCGCTGCAGGTGGAGCAGCTGCTCCACCACCGGCGCTCGCGCTA CCAGGACATCCTCGTCTTCCGCAGTAAGACCTATGGCAACGTGCTGGTGTTGGACGGTGTCATCCAGTGCACGGA GAGAGACGAGTTCTCCTACCAGGAGATGATCGCCAACCTGCCTCTCTGCAGCCACCCCAACCCGCGAAAGGTGCT GATCATCGGGGGCGGAGATGGAGGTGTCCTGCGGGAGGTGGTGAAGCACCCCTCCGTGGAGTCCGTGGTCCAGTG TGAGATCGACGAGGATGTCATCCAAGTCTCCAAGAAGTTCCTGCCAGGCATGGCCATTGGCTACTCTAGCTCGAA GGTGACCCTACATGTGGGTGACGGTTTTGAGTTCATGAAACAGAATCAGGATGCCTTCGACGTGATCATCACTGA CTCCTCAGACCCCATGGGCCCCGCCGAAAGTCTCTTCAAGGAGTCCTATTACCAGCTCATGAAGACAGCCCTCAA GGAAGATGGTGTCCTCTGCCGGGGGGGGGTGCGAGTGCCTGCACCTGGACCTCATCAAGGAGATGCGGCAGTT CTGCCAGTCCCTGTTCCCCGTGGTGGCCTATGCCTACTGCACCATCCCCACCTACCCCAGCGGCCAGATCGGCTT CATGCTGTGCAGCAGCAACCCGAGCACCGAACTTCCAGGAGCCGGTGCAGCCGCTGACACAGCAGCAGCAGCAGCACACCA GATGCAGCTGAAGTACTACAACTCCGACGTGCACCGCGCCCTTTGTGCTGCCCGAGTTTGCCCGCAAGGCCCT GAATGATGTGAGC<u>TGA</u>GCCCAGGCGCCACCACTGATGCCACCCAGGACCTCGGACCTTGGAGCCTGCGGGGTGCC TGTGTACAGCGCCATCTCTCTGCCTTCTGTTGCCCCCG

53/6881 FIGURE 51

MEPGPDGPAASGPAAIREGWFRETCSLWPGQALSLQVEQLLHHRRSRYQDILVFRSKTYGNVLVLDGVIQCTERD EFSYQEMIANLPLCSHPNPRKVLIIGGGDGGVLREVVKHPSVESVVQCEIDEDVIQVSKKFLPGMAIGYSSSKVT LHVGDGFEFMKQNQDAFDVIITDSSDPMGPAESLFKESYYQLMKTALKEDGVLCCQGECEWLHLDLIKEMRQFCQ SLFPVVAYAYCTIPTYPSGQIGFMLCSKNPSTNFQEPVQPLTQQQVAQMQLKYYNSDVHRAAFVLPEFARKALND VS

54/6881 FIGURE 52

55/6881 FIGURE 53

MPLTPTVQGFQWILRGPDVETSPLGAPRAASHGVG

56/6881 FIGURE 54

AGATGGAAGATGAGGAGGTCGCTGAGAGCTGGGAAGAGGCGGCAGACAGCGGGGAAATCCAAATCTCCTCCCAAA GTGCCCATTGTGATTCAGGACGATAGCCTTCCCGCGGGGCCCCCTCCACAGATCCGCATCCTCAAGAGGCCCACC AGCAACGGTGTGGTCAGCAGCCCCAACTCCACCAGCAGGCCCACCCTTCCAGTCAAGTCCCTAGCACAGCGAGAG GCCGAGTACGCCGAGGCCCGGAAGCGGATCCTGGGCAGCCCCAGCCCCGAGGAGGAGCAGGAGAAACCCATCCTC GATGGGTCTCAAGGCTTCAAACAGCGCAGATAAATGCAGGCAAGAAAAGATGCCGCCGTTGCTGCCGTCACCGCC TCCTGGGTCGTCCGCCACGGGTTGCACTGCCGTGGCAGACAGCTGGACTTGAGCAGAGGGAACGACCTGACTTAC TTGCACTGTGATCCCCCTTGCTCCGCCCACTGTGACCTTGAACCCCATGCACTGTGACCTCCCCCCTTCTCCCCC TTCCCACTGTGATTGGCACATCGACAAGGGCTGTCCCAAGTCAATGGAAAGGGAAAGGGTGGGGGTTAGGGGAAG GTTGGGGGGACCCAGCAAGGACTCAGAGAGTCAGACAGTGCCACTTGGCCACTTGGGGTAAAGCCAGTGCCAGCA AAGGGTAGTTTGGTAGTCTACTTAAAAATGTTTCTGGGAAATTCACTAGAAACATTAACCAATAGGATTTTGGTG AGCTTAGCTTCTGTATTCCTACTGCCGCCCAGAAAAGGGGCAGGGCTCTGCAGCCGCCAGGACAGACGAGCACCC CATGCCTATACCTCCCCCGAGCTAAGTCCCAGGGCATCTGGGCCTTGCCTGGAGACTGGGCTAGCTCTGTAG GCTCGGAGAGCCTGGGGAGGGTGCCAACCCCACCTCTAGTATTTTGGGAGATAGGGAAAGTGAACCGACTTCCCC TTCCCATACCCCTCAGGGTGGTTCCCTACCAGCCAGGCTTACTACTTCTAGAAGAAAGCAGAGTGCCAGGGAGTG AGATTGCATCCCTGGGCTTAGAAGTGACGGAGAGAGACTTGTTTAGTATTTTGCCATCAGCACAAGGAAAACCA GGAGAGAGTCTGCCTCCAGGACTCTGAGCCTTCTGCCTCGTATGTTCAGAAGGTGGATAGGTCTTCCCACTCCAG CATGGCTTGAACTCTTAGGGGTCTGCAGTGCTCCATCTCCATTGGTGGCCCCAGCTCAGTAACTATACCTGGTAC ATTTCCTGTGTGCAATCAGTACCTTGAAGGCAGAACATTCTGAATAAAGTTGGAAAAAGAACA

57/6881 FIGURE 55

AAGCCCCCGAGCCCAGTGTGTCTGGACCTTTTCCCTGTTGCCCCAGAGGAGCTTCGGGCTCCTGGCAGCCGCTGG TCCCTGGGGACCCCTGCCCCTCTCCAAGGGTTGCTATGGCCATTATCCCCAGGAGGCTCAGATACAGAGATCACC AGCGGGGGATGCGGCCCAGCAGGGCTGGCAGCTGGCCACACTGTCCTGGTGCCCAGCCCCCAGCTCTGGAGGGA ATGCGGGTGTACCAGCGTGAAGAGGTCCCCGGCTGCCCCGAGGCCCACGCTGTCTTCCTAGAGCCTGGCCAGGTA GTGCAAGAGCAGGCCCTGAGCACAGAGGAGCCCAGGGTGGAGTTGTCTGGGTCCACCCGAGTGAGCCTCGAAGGT CCTGAGCGGAGGCGCTTCTCGGCATCGGAGCTGATGACCCGGCTGCACTCTTCTCTGCGCCTGGGGCCGAATTCA GCAGCCCGGCACTCATCTCTGGGTCAGGCACCGGAGCAGCCCGGGAAGGGAAAGCATCTGGAATGGAGGCTCGA AGTGTAGAGATGAGCGGGGACCGGGTGTCGCGGCCAGCCCCTGGTGACTCACGAGAGGGGCGATTGGTCCGAGCCC AGGCTAGACACAGGAAGAGCCGCCTTTGGGGTCCAGGAGCACCAACGAGCGCGCCCAGTCTCGATTCCTCCTT AACTCCGTCCTCTATCAGGAATACAGCGACGTGGCCAGCGCCGCGAACTGCGGCGGCAGCAGCGCGAGGAGGAG GGCCCGGGGGACGAGGCCGAGGGCGCAGAGGAGGGGGCCGGGGCCGAGCCTCTCCCCCAGCAGCTCC TTCCGGGCGCAGCGCTCGGCGCAGGCTCCACCTTCTCGCTGTGGCAGGATATCCCCGACGTACGCGGCAGCGGC GTCCTGGCCACGCTGAGCCTGCGGGACTGCAAGCTGCAGGAGGCCAAGTTTGAGCTGATCACCTCCGAGGCCTCC TACATCCACAGCCTGTCGGTGGCTGTGGGCCACTTCTTAGGCTCTGCCGAGCTGAGCGAGTGTCTGGGGGGCGCAG GACAAGCAGTGGCTGTTTTCCAAACTGCCCGAGGTCAAGAGCACCAGCGAGAGGTTCCTGCAGGACCTGGAGCAG CGGCTGGAGGCAGATGTGCTGCGCTTCAGCGTGTGCGACGTGGTGCTGGACCACTGCCCGGCCTTCCGCAGAGTC TACCTGCCCTATGTCACCAACCAGGCCTACCAGGAGCGCACCTACCAGCGCCTGCTCCTGGAGAACCCCAGGTTC CCTGGCATCCTGGCTCGCCTGGAGGAGTCTCCTGTGTGCCAGCGTCTGCCCCTTACCTCCTTATCCTGCCC TTCCAGAGGATCACCCGCCTCAAGATGTTGGTGGAGAACATCCTGAAGCGGACAGCACAGGGCTCTGAAGACGAA GACATGGCCACCAAGGCCTTCAATGCGCTCAAGGAGCTGGTGCAGGAGTGCAATGCTAGTGTACAGTCCATGAAG AGGACAGAGGAACTCATCCACCTGAGCAAGAAGATCCACTTTGAGGGCAAGATTTTCCCGCTGATCTCTCAGGCC GCCGTTTTCGTCCATGCCAAGATGGCTGAGCTGCAGGTGCGGGACCTGAGCCTGAAGCTGCAGGGCATCCCGGG GAGAAGCAGCGATGGATCTCAGCCTTGTGCCCCTCCAGCCCCCAGGAGGACAAGGAGGTCATCAGTGAGGGGGAA GATTGCCCCCAGGTTCAGTGTGTTAGGACATACAAGGCACTGCACCCAGATGAGCTGACCTTGGAGAAGACTGAC GTGCCCCAGGCCTATGTGGAAGAGATCAGCAGCCTCAGCGCCCCGCCTCCGAAACCTCCGGGAGAATAAGCGAGTC ACAAGTGCCACCAGCAAACTGGGGGAGGCTCCTGTGTGATGGGCAGCCATGGCCTAGGACCCCACCTCCATGCCT GGCTCCTGGATGGTCCTGGAGGGGCCTGCAGTGTCTCCATTCCCCAAGCTGCTCCTGCTGGCACTTCGCTTCTGT GGCCTTGGCATTGAGGGCACAGGCTGGACACAGGAATGGGGGCGCCTCCAGAGGGTCTCTCCGTCCTCATGCTCC TCAGTGTCCACACTTCAAGGCCAAGGATAGTTTCTTCCTCTGACATGGGGACCATAACAGGTGATCACTGATACC CTCC

58/6881 FIGURE 56

MDCGPPATLQPHLTGPPGTAHHPVAVCQQESLSFAELPALKPPSPVCLDLFPVAPEELRAPGSRWSLGTPAPLQG
LLWPLSPGGSDTEITSGGMRPSRAGSWPHCPGAQPPALEGPWSPRHTQPQRRASHGSEKKSAWRKMRVYQREEVP
GCPEAHAVFLEPGQVVQEQALSTEEPRVELSGSTRVSLEGPERRRFSASELMTRLHSSLRLGRNSAARALISGSG
TGAAREGKASGMEARSVEMSGDRVSRPAPGDSREGDWSEPRLDTQEEPPLGSRSTNERRQSRFLLNSVLYQEYSD
VASARELRRQQREEEGPGDEAEGAEEGPGPPRANLSPSSSFRAQRSARGSTFSLWQDIPDVRGSGVLATLSLRDC
KLQEAKFELITSEASYIHSLSVAVGHFLGSAELSECLGAQDKQWLFSKLPEVKSTSERFLQDLEQRLEADVLRFS
VCDVVLDHCPAFRRVYLPYVTNQAYQERTYQRLLLENPRFPGILARLEESPVCQRLPLTSFLILPFQRITRLKML
VENILKRTAQGSEDEDMATKAFNALKELVQECNASVQSMKRTEELIHLSKKIHFEGKIFPLISQARWLVRHGELV
ELAPLPAAPPAKLKLSSKAVYLHLFNDCLLLSRRKELGKFAVFVHAKMAELQVRDLSLKLQGIPGHVFLLQLLHG
QHMKHQFLLRARTESEKQRWISALCPSSPQEDKEVISEGEDCPQVQCVRTYKALHPDELTLEKTDILSVRTWTSD
GWLEGVRLADGEKGWVPQAYVEEISSLSARLRNLRENKRVTSATSKLGEAPV

59/6881 FIGURE 57A

GAAGTTGCGCGCAGGCCGGCGGGGGGGGGAGCCGACACCGAGGCCGGCGTGCAGGCGTGCGGGTGTGCGGGAGCCGG GCTCGGGGGGATCGGACCGAGAGCGAGAAGCGCGGCATGGAGCTCCAGGCAGCCCGCGCCTGCTTCGCCCTGCTG TGGGGCTGTGCCCGCCGCCGCGGCGCGCGCGCGCAGGGCAAGGAAGTGGTACTGCTGGACTTTGCTGCAGCTGGA ATCTACATGTACTCCGTGTGCAACGTGATGTCTGGCGACCAGGACAACTGGCTCCGCACCAACTGGGTGTACCGA GGAGAGGCTGAGCGTATCTTCATTGAGCTCAAGTTTACTGTACGTGACTGCAACAGCTTCCCTGGTGGCGCCAGC TCCTGCAAGGAGACTTTCAACCTCTACTATGCCGAGTCGGACCTGGACTACGGCACCAACTTCCAGAAGCGCCTG TTCACCAAGATTGACACCATTGCGCCCGATGAGATCACCGTCAGCAGCGACTTCGAGGCACGCCACGTGAAGCTG AACGTGGAGGAGCGCTCCGTGGGCCCCCCCCCAAAGGCTTCTACCTGGCCTTCCAGGATATCGGTGCCTGT GTGGCGCTGCTCCGTCCGTGTCTACTACAAGAAGTGCCCCGAGCTGCTGCAGGGCCTGGCCCACTTCCCTGAG ACCATCGCCGGCTCTGATGCACCTTCCCTGGCCACTGTGGCCGCCACCTGTGTGGACCATGCCGTGGTGCCACCG GGGGGTGAAGAGCCCCGTATGCACTGTGCAGTGGATGGCGAGTGGCTGGTGCCCATTGGGCAGTGCCTGTGCCAG GCAGGCTACGAGAAGGTGGAGGATGCCTGCCAGGCCTGCTCGCCTGGATTTTTTAAGTTTGAGGCATCTGAGAGC CCCTGCTTGGAGTGCCCTGAGCACACGCTGCCATCCCCTGAGGGTGCCACCTCCTGCGAGTGTGAGGAAGGCTTC TTCCGGGCACCTCAGGACCCAGCGTCGATGCCTTGCACACGACCCCCTCCGCCCCACACTACCTCACAGCCGTG GGCATGGGTGCCAAGGTGGAGCTGCGCTGGACGCCCCCTCAGGACAGCGGGGGCCGCGAGGACATTGTCTACAGC GTCACCTGCGAACAGTGCTGGCCCGAGTCTGGGGAATGCGGGCCGTGTGAGGCCAGTGTGCGCTACTCGGAGCCT CCTCACGGACTGACCCGCACCAGTGTGACAGTGAGCGACCTGGAGCCCCACATGAACTACACCTTCACCGTGGAG CCCCCAAGGTGAGGCTGGAGGGCCGCAGCACCACCTCGCTTAGCGTCTCCTGGAGCATCCCCCCGCCGCAGCAG AGCCGAGTGTGGAAGTACGAGGTCACTTACCGCAAGAAGGGAGACTCCAACAGCTACAATGTGCGCCGCACCGAG GGCCAGGGGGCCGCAACGTGCACGAATTCCAGACGCTGTCCCCGGAGGGATCTGGCAACTTGGCGGTGATT GGCGGCGTGGCTGTCGGTGCTCTGGTGCTGGCAGGAGTTGGCTTCTTTATCCACCGCAGGAGGAAG AACCAGCGTGCCCGCCAGTCCCCGGAGGACGTTTACTTCTCCAAGTCAGAACAACTGAAGCCCCTGAAGACATAC ACTCGGCAGAAGGTGATCGGAGCAGGAGAGTTTGGGGAGGTGTACAAGGGCATGCTGAAGACATCCTCGGGGAAG AAGGAGGTGCCGGTGGCCATCAAGACGCTGAAAGCCGGCTACACAGAGAAGCAGCGAGTGGACTTCCTCGGCGAG GCCGGCATCATGGGCCAGTTCAGCCACCACACATCATCCGCCTAGAGGGCGTCATCTCCAAATACAAGCCCATG ATGATCATCACTGAGTACATGGAGAATGGGGCCCTGGACAAGTTCCTTCGGGAGAAGGATGGCGAGTTCAGCGTG CTGCAGCTGGTGGGCATGCTGCGGGCATCGCAGCTGGCATGAAGTACCTGGCCAACATGAACTATGTGCACCGT GACCTGGCTGCCCGCAACATCCTCGTCAACAGCAACCTGGTCTGCAAGGTGTCTGACTTTGGCCTGTCCCGCGTG CTGGAGGACGACCCGAGGCCACCTACACCACCAGTGGCGGCAAGATCCCCATCCGCTGGACCGCCCGGAGGCC ATTTCCTACCGGAAGTTCACCTCTGCCAGCGACGTGTGGAGCTTTGGCATTGTCATGTGGGAGGTGATGACCTAT GGCGAGCGGCCCTACTGGGAGTTGTCCAACCACGAGGTGATGAAAGCCATCAATGATGGCTTCCGGCTCCCCACA TTCGCTGACATCGTCAGCATCCTGGACAAGCTCATTCGTGCCCCTGACTCCCTCAAGACCCTGGCTGACTTTGAC ATGACCAACGACATCAAGAGGATTGGGGTGCGGCTGCCCGGCCACCAGAAGCGCATCGCCTACAGCCTGCTG GGACTCAAGGACCAGGTGAACACTGTGGGGATCCCCATCTGAGCCTCGACAGGGCCTGGAGCCCCATCGGCCAAG TTCCTCCCCTGCAACTTCCGCTGAGGGGTCTCGGATGACACCCTGGCCTGAACTGAGGAGATGACCAGGGATGC TGGGCTGGGCCCTCTTTCCCTGCGAGACGCACACAGCTGAGCACTTAGCAGGCACCGCCACGTCCCAGCATCCCT GGAGCAGGAGCCCCGCCACAGCCTTCGGACAGACATATGGGATATTCCCAAGCCGACCTTCCCTCCGCCTTCTCC CACATGAGGCCATCTCAGGAGATGGAGGGCTTGGCCCAGCGCCAAGTAAACAGGGTACCTCAAGCCCCATTTCCT CACACTAAGAGGGCAGACTGTGAACTTGACTGGGTGAGACCCAAAGCGGTCCCTGTCCCTCTAGTGCCTTCTTTA GACCCTCGGGCCCCATCCTCATCCCTGACTGGCCAAACCCTTGCTTTCCTGGGCCTTTGCAAGATGCTTGGTTGT

60/6881 FIGURE 57B

FIGURE 58

62/6881 FIGURE 59

GCTCGTGTTAAATCTAGAACCGTAGCCAGACATGGGACTGGAGGACGAGCAAAAGATGCTTACCGAATCCGGAGA
TCCTGAGGAGGAGGAGGAGGAGGAGGAGGAGTATTAGTGGATCCCCTAACAACAGTGAGAGAGCAATGCGAGCAGTT
GGAGAAATGTGTAAAGGCCCGGGAGCGGCTAGAGCTCTATGATGAGCATGTATCCTCTCGATCACATACAGAAGA
GGATTGCACGGAGGAGCTCTTTGACTTCTTGCATGCAAAGGACCATTGCGTGGCCCACAAACTCTTTAACAACTT
GAAATAAATGTGTGGACTTAATTCACCCCAGCCTTCATCATCTGGGCATCAGAATATTTCCTTATGGTTTCGGAT
GTACCATTTGTTTCTTATTTGTGTAACTGTAAGTTCACATGAACCTCGTGGGTTTTGGCTTAGGCTGGTAGCTTC
TATGTAATTCGCAGTGATTCCATCTAAATAAAAGTTCTGTGATCTGC

FIGURE 60

64/6881 FIGURE 61

MIRTLLLSTLVAGALSCGDPTYPPYVTRVVGGEEARPNSWPWQVSLQYSSNGKWYHTCGGSLIANSWVLTAAHCI SSSRTYRVGLGRHNLYVAESGSLAVSVSKIVVHKDWNSNQISKGNDIALLKLANPVSLTDKIQLACLPPAGTILP NNYPCYVTGWGRLQTNGAVPDVLQQGRLLVVDYATCSSSAWWGSSVKTSMICAGGDGVISSCNGDSGGPLNCQAS DGRWQVHGIVSFGSRLGCNYYHKPSVFTRVSNYIDWINSVIANN

65/6881 FIGURE 62

CCGGCGGCTGCAGATGGAGGGCGAGGGCGGCGAGACCCCGGAGCAGCCCGGGCTGAACGGGGCAGCGGCGGC GGCGGCGGGGCACCCGACGAGGCGCCGAGGCGCTGGGCAGCGCGGACTGCGAGCTGAGCGCCAAGCTGCTGCG GCGCGCAGACCTCAACCAGGGCATCGGCGAGCCCCAGTCGCCCAGCCGCGTCTTCAACCCCTACACCGAGTT CATCGACCTGATGGAGCTAAAACTCATGATGGAGAAACTTGGGGCCCTCAGACCCACCTGGGCCTGAAAAACAT GATCAAGGAGGTGGATGAGGACTTTGACAGCAAGCTGAGCTTCCGGGAGTTCCTCCTGATCTTCCGCAAGGCGGC GGCCGGGGAGCTTCAGGAGGACAGCGGGCTGTGCGTGCTGGCCCGCCTCTCTGAGATCGACGTCTCCAGTGAGGG TGTCAAGGGGGCCAAGAGCTTCTTTGAGGCCAAGGTCCAGGCCATCAACGTGTCCAGCCGCTTCGAGGAGGAGAT CAAGGCAGAGCAGGAGAAAGGAAGAAGCAGCGGAGAGATGAAGCAGCGGAAAGCGGCCTTCAAGGAGCTGCA GGGAGGCCGAGCCTGAATCCTTGCCTGTCTGACGGGACCACTACTAAAAACCTAAAAATATCTGTGAATGGAG CAAGTTCAGGGGTCTTATGGAGGTGGCCCGGCCCCTCCCGGTCCCTTCCACTCTGCACGAGGCCGCCACACCGG ACATCCCTGTCCCCCAACCCGGGAACCCCTGCCCTCCTCCAGCAGGCCGCACCGCCCCTGGGGCCCCCTGCCAG CCCCTTCCCAGGCTGGGAGACAGCAGAAGAGATAGAATCAGGGCTGCCCCCACAGAGTGGGACCCAAGGGGCTAA TTGGAGGCACGAGGGGACCCCTCCCCAGGGCCTTTTCCTCCTCTGCGTCTTCCATCTACTGAAATGGGAGAGGGG GTGGGGAGCTTCTGTTCTGGTGAAGGGACCCGGGCAGGCCCCCAGCACCCCATGCTGACTTGGAGAACCCCAGAT $\verb|CTCTGGGGCCCAGCCAGGCAGGTGTGGGGGCAGCTGTGCCAATCTACCTCACAGGCCCACCCCCTGCCGGGCAT| \\$ CGCCTTGATTCTCCGAGAAGCCTCCGAGAAGTGCTTTAAGTGTGTTTTGCATGCGCCAGGCGGTGGGCAGCGGGGG CCACCCCTGAGGAAGCATGGGGACCCTAACACCCTGGTGCCCTGCACCAGACAGGCCGTGGTCAGGCCCAGGCC GTGTCATAACGACGTCACTGCTTTTTAAACTCGATAACTCTTTATTTTAGTAAAATGCCCAGGAGTCCTGGAAGC TACGCGGACTTGCAGAGGTTTTATTTTTTGGCCTTAGAATCTGCAGAAATTAGGAGGCACCGAGCCCAGCGCAGC ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

66/6881 FIGURE 63

MATDELATKLSRRLQMEGEGGGETPEQPGLNGAAAAAAGAPDEAAEALGSADCELSAKLLRRADLNQGIGEPQSP SRRVFNPYTEFKEFSRKQIKDMEKMFKQYDAGRDGFIDLMELKLMMEKLGAPQTHLGLKNMIKEVDEDFDSKLSF REFLLIFRKAAAGELQEDSGLCVLARLSEIDVSSEGVKGAKSFFEAKVQAINVSSRFEEEIKAEQEERKKQAEEM KQRKAAFKELQSTFK

67/6881 FIGURE 64

GCCTCCCACTTGGTTGCTCGTACGCGGCTAGTGGGTCCTCAGTGGATGTAGGCTGGGCGCGCGATGTTCGACGG GACACCGCCGGAGAGCGACCTCGGGGTTAAGGGGTGGGGCTGACGTCAGGAGCCAAGATGGCGGCGGTGGTCGCC GCTGCAGCCACAGCTCCCCGTATCAAGAAATTTGCCATCTATCGATGGGACCCAGACAAGGCTGGAGACAAACCT CATATGCAGACTTATGAAGTTGACCTTAATAAATGTGGCCCCATGGTATTGGATGCTTTAATCAAGATTAAGAAT GAAGTTGACTCTACTTTGACCTTCCGAAGATCATGCAGAGAGGCATCTGTGGCTCTTGTGCAATGAACATCAAT GGAGGCAACACTCTAGCTTGCACCCGAAGGATTGACACCAACCTCAATAAGGTCTCAAAAAATCTACCCTCTTCCA ${\tt CACATGTATGTGATAAAGGATCTTGTTCCCGATTTGAGCAACTTCTATGCACAGTACAAATCCATTGAGCCTTAT}$ TTGAAGAAGAAGATCACAGAAGCCAAGCAGCAGTATCTGCAGTCCATAGAAGAGCGTGAGAAACTGGAC GGGCTCTACGAGTGCATTCTCTGTGCCTGCTGTAGCACCAGCTGCCCCAGCTACTGGTGGAACGGAGACAAATAT CTGGGGCCTGCAGTTCTTATGCAGGCCTATCGCTGGATGATTGACTCCAGAGATGACTTCACAGAGGAGCGCCTG GCCAAGCTGCAGGACCCATTCTCTCTATACCGCTGCCACACCATCATGAACTGCACAAGGACCTGTCCTAAGGGT CTGAATCCAGGGAAAGCTATTGCAGAGATCAAGAAAATGATGGCAACCTATAAGGAGAAGAAAGCTTCAGTTTAA CTGTTTCCATGCTAAACATGATTTATAACCAGCTCAGAGCTGAACATAATTTATATCTAATTTGAGTTCCTTTAA AGATCTTGGTTTTCCATGAATACAGCATGTATAATAAAAATTTTAAGAAATAAAATGTTATTCTACTTTATTAACA AAAAA

FIGURE 65

MAAVVALSLRRRLPATTLGGACLQASRGAQTAAATAPRIKKFAIYRWDPDKAGDKPHMQTYEVDLNKCGPMVLDA LIKIKNEVDSTLTFRRSCREGICGSCAMNINGGNTLACTRRIDTNLNKVSKIYPLPHMYVIKDLVPDLSNFYAQY KSIEPYLKKKDESQEGKQQYLQSIEEREKLDGLYECILCACCSTSCPSYWWNGDKYLGPAVLMQAYRWMIDSRDD FTEERLAKLQDPFSLYRCHTIMNCTRTCPKGLNPGKAIAEIKKMMATYKEKKASV

FIGURE 66

GCATCCCACCAGCGCGTGTGTGTGGCTGGCGTGGAGACCCTCGTGGACATTTATGGGTCAGTGCCTGAGGGCAC AGAAATGTTTGAGGTCTATGGGACGCCTGGCGTGGACATCTACATCTCTCCCAACATGGAGAGGGGCCGGGAGCG $\tt TGCAGACACCAGGCGGTGGCGCTTTGACGCGACTTTGGAGATCATCGTGGTCATGAACTCCCCCAGCAATGACCT$ CAACGACAGCCATGTTCAGATTTCCTACCACTCCAGCCATGAGCCTCTGCCCCTGGCCTATGCGGTGCTCTACCT CACCTGTGTTGACATCTCTCTGGATTGCGACCTGAACTGTGAGGGAAGGCAGGAACATTTGTAGACAAGCG GCAGTGGGTCTGGGGGCCCAGTGGGTATGGCGGCATCTTGCTGGTGAACTGTGACCGTGATGATCCGAGCTGTGA GCAGGGCCCTGCAGCCCTCTTTGATGACCACAAACTTGTCCTCCATACCTCCAGCTATGATGCCAAACGGGCACA GGTCTTCCACATCTGCGGTCCTGAGGATGTGTGTGAGGCCTATAGGCATGTGCTGGGCCAAGATAAGGTGTCCTA TGAGGTACCCCGCTTGCATGGGGATGAGGAGCGCTTCTTCGTGGAAGGCCTGTCCTTCCCTGATGCCGGCTTCAC AGGACTCATCTCCTTCCATGTCACTCTGCTGGACGACTCCAACGAGGATTTCTCGGCATCCCCTATCTTCACTGA ${\tt CACTGTGGTGTTCCGAGTGGCACCCTGGATCATGACGCCCAGCACTCTGCCACCCCTAGAGGTGTATGTGTGCCG}$ TGTGAGGAACAACACGTGTTTTGTGGATGCGGTGGCAGAGCTGGCCAGGAAGGCCGGCTGCAAGCTGACCATCTG CCCACAGGCCGAGAACCGCAACGACCGCTGGATCCAGGATGAGATGGAGCTGGGCTACGTTCAGGCGCCGCACAA GACCCTCCCGGTGGTCTTTGACTCCCCAAGGAATGGGGAACTGCAGGATTTCCCTTACAAAAGAATCCTGGGTCC AGATTTTGGTTACGTGACTCGGGAACCACGCGACAGGTCTGTGAGTGGCCTGGACTCCTTTGGGAACCTGGAGGT AAGTGGCCGCAGGGTCACCCAGGTGGTGCGGGACTTCCTCCATGCCCAGAAGGTGCAGCCCCCCGTGGAGCTCTT TGTGGACTGGTTGGCCGTGGGCCATGTGGATGAGTTTCTGAGCTTTGTCCCTGCCCCGATGGGAAGGGCTTCCG GATGCTCCTGGCCAGCCCTGGGGCCTGCTTCAAGCTCTTCCAGGAAAAGCAGAAGTGTGGCCACGGGAGGGCCCT CCTGTTCCAGGGGGTTGTTGATGATGAGCAGGTCAAGACCATCTCCATCAACCAGGTGCTCTCCAATAAAGACCT AGAGTGTGACATCATTGACATCCCACAGCTCTTCAAGACCGAGAGGAAAAAAGCAACGGCCTTCTTCCCTGACTT GGTGAACATGCTGGTGCTGGGGAAGCACCTGGGCATCCCCAAGCCCTTTGGGCCCATCATCAATGGCTGCTGCTG CCTGGAGGAGAGGTGCGGTCCCTGCTGGAGCCGCTGGGCCTCCACTGCACCTTCATTGATGACTTCACTCCATA ${\tt CCACATGCTGCATGGGGAGGTGCACTGTGGCACCAATGTGTGCAGAAAGCCCTTCTCTTTCAAGTGGTGGAACAT}$ GGTGCCCTGAGACAGCTCCCACCCACCATCCTGTCCCCCTGGGGCGGCATTGGCCCAGGTGGTGGAGACAGAGA CAGGCCCCTGAACGATAAGCACCAAGAGACCCCAAGGCTCCAGATGGAACACTGAGGGTGACCGTCCCTCTCAGA AGCCTTTTCCCTGGAAGTGTCCATGCCTCACCTGCAACCCATGTGGTTCTCAGACTTGAATCTTCTCGGCCCCCC AAAAAGAAGGACCTCATTTCTTATAGCCTCTCCTGTGATTCAACACAACCCATGGAGATGTCCCCTTCTCACTCT GAAATCATCCATTTGGGGACAAATCCACATTGGGGTCTAGAAACATCCACGTATCTCATCAGCCATCTTGTCCTG TGCATCCTAACAGAGGAAGGATCCATGATTCTGCTTTGGTCCAATTGCTTCCTCTCTGCAGAGGAACAACCCTAA AACCAGACCACTCCACGCAGGACAGGCAGGAGAGATTCTTCCTAAAGCCTCCCCCATAAAAAGGGAGCTGTGGAT CCACTTAGATCAGGGCGGAACCATCTTTCACCCGGCCAAGCTCCTGCCCAGATGTTGACCCTCACCCAGCGTGAG CTGTCACATAGTAGGAGCTTCTAGATGCATGTGGAAGCAATGAGAGTTGTCCCTTAGCCTTATAAACTCCCCATG ATCTGACATGCAGAAATCCAGCCTTGTCCAGAATCCTCCTGGAATTTCTTGGAGACGAAAGTATCTGGGGGGATTG TTGGGTACTAGGGAGACTGGGTACAAGGGTGAAAAGTAGTTCCCATAATACACATGGTTGACTATGGTGATCCAC CTTGTGATGGTTAATATTAGGTGTCTGGAGAAGGTTGCTTCATTGGCCCTGGGACTTCTCTCTGCAGGAGGAGAG **AACGCTGCCTCTCCTCTGGATTGGTCTCAGGCTCTCTGTTGGCCTTTGGTCAGCGTTTCCACATCCTGCTCTGCT** GCAGGAGAGGGGGCTAAGGGGCTGGATCCACCAAGGCAGCTCACAGGGGAAAACTCTGGGAATGAACCACTGAA TTCAGGGGATGGGGGGGGGGGGGTTCTCGAGGTGTGTGCCAGCTACACGTGTGTTCTGTATGGGTCCAGCTG CGTTTCCATCACTCGCTAATAAATCAACAGAAACAC

70/6881 FIGURE 67

CCGTGTGTGTGCTGGCACCTTGACTCAGCTTGACATCTGCAGCTCTGCCCCTGAGGACTGCACGTCCTTCAGCA TCAACGCCTCCCCAGGGGTGGTCGTGGATATTGCCCACGGCCCTCCAGCCAAGAAGAAATCCACAGGTTCCTCCA CATGGCCCCTGGACCCTGGGGTAGAGGTGACCCTGACGATGAAAGTGGCCAGTGGTAGCACAGGCGACCAGAAGG TTCAGATTTCATACTACGGACCCAAGACTCCACCAGTCAAAGCTCTACTCTACCTCACCGGGGTGGAAATCTCCC TGTGCGCAGACATCACCCGCACCGGCAAAGTGAAGCCAACCAGAGCTGTGAAAGATCAGAGGACCTGGACCTGGG GCCCTTGTGGACAGGGTGCCATCCTGCTGGTGAACTGTGACAGAGACAATCTCGAATCTTCTGCCATGGACTGCG AGGATGATGAAGTGCTTGACAGCGAAGACCTGCAGGACATGTCGCTGATGACCCTGAGCACGAAGACCCCCAAGG ACTTCTTCACAAACCATACACTGGTGCTCCACGTGGCCAGGTCTGAGATGGACAAAGTGAGGGTGTTTCAGGCCA CACGGGGCAAACTGTCCTCCAAGTGCAGCGTAGTCTTGGGTCCCAAGTGGCCCTCTCACTACCTGATGGTCCCCG GTGGAAAGCACAACATGGACTTCTACGTGGAGGCCCTCGCTTTCCCGGACACCGACTTCCCGGGGCTCATTACCC TCACCATCTCCCTGCTGGACACGTTCAACCTGGAGCTCCCCGAGGCTGTGGTGTTCCAAGACAGCGTGGTCTTCC GCGTGCCCCTGGATCATGACCCCCAACACCCAGCCCCGCAGGAGGTGTACGCGTGCAGTATTTTTGAAAATG AGGACTTCCTGAAGTCAGTGACTACTCTGGCCATGAAAGCCAAGTGCAAGCTGACCATCTGCCCTGAGGAGGAGA ACATGGATGACCAGTGGATGCAGGATGAAATGGAGATCGGCTACATCCAAGCCCCACACAAAACGCTGCCCGTGG TCTTCGACTCTCCAAGGAACAGAGGCCTGAAGGAGTTTCCCATCAAACGCGTGATGGGTCCAGATTTTGGCTATG TAACTCGAGGGCCCCAAACAGGGGGTATCAGTGGACTGGACTCCTTTGGGAACCTGGAAGTGAGCCCCCCAGTCA CAGTCAGGGGCAAGGAATACCCGCTGGGCAGGATTCTCTTCGGGGACAGCTGTTATCCCAGCAATGACAGCCGGC AGATGCACCAGGCCCTGCAGGACTTCCTCAGTGCCCAGCAGGTGCAGGCCCCTGTGAAGCTCTATTCTGACTGGC TGTCCGTGGGCCACGTGGACGAGTTCCTGAGCTTTGTGCCAGCACCCGACAGGAAGGGCTTCCGGCTGCTCCTGG CCAGCCCCAGGTCCTGCTACAAACTGTTCCAGGAGCAGCAGAATGAGGGCCACGGGGAGGCCCTGCTGTTCGAAG GGATCAAGAAAAAAAACAGCAGAAAATAAAGAACATTCTGTCAAACAAGACATTGAGAGAACATAATTCATTTG TGGAGAGATGCATCGACTGGAACCGCGAGCTGCTGAAGCGGGAGCTGGCCTGGCCGAGAGTGACATCATTGACA TCCCGCAGCTCTTCAAGCTCAAAGAGTTCTCTAAGGCGGAAGCTTTTTTCCCCAACATGGTGAACATGCTGGTGC TAGGGAAGCACCTGGGCATCCCCAAGCCCTTCGGGCCCGTCATCAACGGCCGCTGCTGCCTGGAGAGAAGGTGT GTTCCCTGCTGGAGCCACTGGGCCTCCAGTGCACCTTCATCAACGACTTCTTCACCTACCACATCAGGCATGGGG AGGTGCACTGCGGCACCAACGTGCGCAGAAAGCCCTTCTCCTTCAAGTGGTGGAACATGGTGCCCTGAGCCCATC ACTCTGAAGATCCCAACATGGTCCTAGCACTGCACACTCAGTTCTGCTCTAAGAAGCTGCAATAAAGTTTTTTTA AGTCACTTTGTAC

71/6881 FIGURE 68A

CCTCCGATCCGTCTTTAGTTGCTTCTCTTCTTTTTTCTCTCCGGTTTCTCATCACCACCAGCCGCGACCA TGCCCAGGAAGAAGGCGGCGGCGGGCCTGGGAGGAGCCGAGCTCGGGCAACGGCACTGCCCGCGCCGGGCCCA GGAAACGCGGCGGCCGGCGGGCAGGAAGCGCGAGCGGCCGAGCGCTGCAGTAGCAGCAGCGGCGGCGGCAGCA GCAAGGCGGGCGGCGGCGTGGTCATCACCGAACCCGAGCACCCAAGGAGCGCGTCAAACTTGAAGGGTCAA AGTGCAAAGGGCAGCTTTTGATTTTTTGGGGCAACCAACTGGGACTTGATTGGTCGAAAAGAAGTGCCTAAACAGC AAGCTGCTTACCGCAATCTCGGTCAGAATTTGTGGGGGCCCCACAGATATGGGTGCCTGGCGGGGGTCCGGGTGC GGACAGTGGTCTCGGGCTCGTGTGCTGCACACAGCCTCCTCATCACCACGGAAGGGAAGCTGTGGAGCTGGGGTC GAAATGAGAAGGGGCAGCTGGGACATGGTGACACCAAGAGAGTAGAAGCCCCTAGACTCATCGAGGGTCTTAGCC ACGAAGTGATTGTGTCTGCAGCATGTGGGCGGAACCACCTTGGCCTTGACGGAAACGGGCTCCGTGTTTGCGT ACAACGGCCAGCCAATTACCAAAATGGCCTGTGGGGCTGAATTCAGTATGATAATGGACTGCAAAGGAAACCTCT ATTCCTTTGGGTGCCCTGAATATGGTCAGCTGGGACACAACTCAGATGGGAAGTTCATCGCCCGGGCACAGCGGA TAGAGTACGACTGTGAACTAGTTCCCCGGCGAGTGGCCATCTTCATTGAGAAGACGAAAGATGGACAGATTCTGC TCTTCTCCTGGGGCTTTGGTGGCTATGGCCGGCTGGGCCACGCAGAGCAGAAGGATGAGATGGTCCCCCGCCTGG TGAAGCTGTTTGACTTCCCTGGGCGTGGGGCTTCCCAGATCTATGCTGGTTACACCTGCTCCTTTGCTGTCAGTG AAGTGGGTGGTCTGTTTTTCTGGGGGGCCACCAACACCTCCCGTGAATCTACCATGTACCCAAAAGCAGTGCAGG ACCTCTGCGGCTGGAGAATTCGGAGCCTGGCTTGTGGGAAGAGCAGCATCATTGTGGCCGCCGATGAGAGCACCA TCAGCTGGGGTCCGTCACCGACCTTTGGGGAACTGGGCTACGGGGACCACAAGCCCAAGTCTTCCACTGCAGCCC AGGAGGTAAAGACTCTGGATGGCATTTTCTCAGAGCAGGTCGCCATGGGCTACTCACACTCCTTGGTGATAGCAA GAGATGAAAGTGAGACTGAGAAAGAGAAGATCAAGAAACTGCCAGAATACAACCCCCGAACCCTCTGATGCTCCC GGAGACTCCTCCGACTCCACACCTCTCGCGGCAGCTGTCATTTCCATGTGCACTGGGACGGGAAGTCAAACGAGG AATTTAAAAAAGCAAAAGTTGACCGAAGGTGCATTTTTGTTTAGACTCCCTGAGGTTCCGTTTTACACATGATCC TTCTTTCTTCCTTTCCTGAATACACTCCCCAAAACACCCCTTTCCAGTTACAATTAGCATCGTGATCCAAGCAGA TGCCACATGGAAGAGGAATCGCCATTTACTCAGAAAAAATGTCCCTTACAGGAACCGGCAGCAGCTAGGCAGTCA CCGGCCCGCCTCCATCCAAAATCACGCTCGCGTGCTTCGGAAGCATCCGGGTCACTCCTTCTCCCGCTTTTTCTTG CAGATGGGCCTAGGCCGGTGTCGGTTCTGTTTCTCCCCTTGGCTGCCTGTACGCCCACAGCCTTCTGGCTGCGAC ATTATAGAATCGGCCGTGTCCCCCCTGGTGGGGGATTGGGGATCTGTGTTTAGCCATTTATATCTACTTTAGCTG TTAAAGAGGTCCAAATGAAAATCAGGTGATTGTGGAACCATGGGGACTTGGGGGTGGGGCAGAGGTGGGAACATT TGTATCAGTTGAGTCAGCTTGGTGGCTCCCTGTGGAGCCAGGGCTGAGCCTTGTCACGCGCACTCGCCAATTAAG AGATGGACCAGCCAGCAGTCAAGTGCATTCTCCAGTCCTTGCAAGAAGGATCAGCCCTTTCTGTGCCAGCCTCGA TCGGGGTACCGTTCTGCTGACCCAGCTCCCTTTAGTCACGTTTGCTTGGCTCTGGTACCAAATAGTTGGGATTAC CGAAGAGTCCCCTTCCTTGCGTGTCAGCACGGATGCTGTGACTGCCACCTGCGTCCTCGTCAAGTGCCCGAGCTC GCCGCCGTGTGTGCCGCTGAGTGAGTTATGAGGTGCCTTTCCCGGAACCCTCCTCTCGCCTGGACCCAAGAGA GGCGACAGCTGTGGCTGGGGCTCTTGGTTTCCAGAGGGTCTGGACTGGTTTGGGTGCTTTAAAATAGATATTTAG TTCAGTGGTGCTTATGGGGGAGATGGGACTAGAACTTAAGTGTGAGACTTGGGTGGATGGGAAAGTTAAATATTG GTCTCTTCAAGTTTTTTTTTTTTTTTTTGCTTTGTTACCACTTGTCACTGTCTCCATGTTAAAATGCCAAAAATGAT GTAGTTGTTGTTGCTTTTTTCCCTATTTTCCACCCCAGTCGCTCCTTACCGTGACTCCTGCCCTTGGAGGGCATG TAGCAGTGTCTGTCCTGCCAGTCCCAAGGCCCTGTGGGAGGAGACTGGCCTGCATCTCTCTAAGACTTAGTCTGA CGCCACGCGCATCTCTTGTTCTGTTCTAATCAGTAGTCCAGGGGAGAAGCTTCTGCTACTTCAGAGCTTTGCTA AACTAACCTAATTTGTCCAAATCACCCCAAAACCACCATCTCTGACGTAAGCTTCCATGCGACAGCCTGATCCGT TTCCCTGGACAGGTCTCTTTCCTGGAATGCAGCCCAGGCACCTGTGCTCCTGGCACCCTTGAGGTCTCTTTTTG AGCCGTGGTCACCGAGAGGGTTGAGGACGCAGCACCCGAGGTCCCAGCCTTTGCAGGAGCCTCCCTGGGCTTAGC

72/6881 FIGURE 68B

73/6881 FIGURE 69

74/6881 FIGURE 70

MSDQQLDCALDLMRRLPPQQIEKNLSDLIDLVPSLCEDLLSSVDQPLKIARDKVVGKDYLLCDYNRDGDSYRSPW SNKYDPPLEDGAMPSARLRKLEVEANNAFDQYRDLYFEGGVSSVYLWDLDHGFAGVILIKKAGDGSKKIKGCWDS IHVVEVQEKSSGRTAHYKLTSTVMLWLQTNKSGSGTMNLGGSLTRQMEKDETVSDCSPHIANIGRLVEDMENKIR STLNEIYFGKTKDIVNGLRSVQTFADKSKQEALKNDLVEALKRKQQC

,

75/6881 FIGURE 71

 $\verb|CCGCCAGCGCCGCGCCGTGCGCCCTTTCTGGAGCGCGGCCACACCGAACTGGACACGGCCTTCATGTACAGCG|\\$ CCAAGGCCAACCCTTGGGATGGAAAATCACTAAAGCCTGACAGTGTCCGGTCCCAGCTGGAGACGTCATTGAAGA GGCTGCAGTGTCCCCAAGTGGACCTCTTCTACCTACACACCCTGACCACGGCACCCCGGTGGAAGAGACGCTGC ATGCCTGCCAGCGGCTGCACCAGGAGGGCAAGTTCGTGGAGCTTGGCCTCTCCAACTATGCTAGCTGGGAAGTGG $\tt CCGAGATCTGTACCCTCTGCAAGAGCAATGGCTGGATCCTGCCCACTGTGTACCAGGGCATGTACAACGCCACCA$ $\tt CCCGGCAGGTGGAAACGGAGCTCTTCCCCTGCCTCAGGCACTTTGGACTGAGGTTCTATGCCTACAACCCTCTGG$ CTGGGGGCCTGCTGACTGCAAGTACAAGTATGAGGACAAGGACGGGAAACAGCCTGTGGGCCGCTTCTTTGGGA ATAGCTGGGCTGAGACCTACAGGAATCGCTTCTGGAAGGAGCACCACTTCGAGGCCATTGCGTTGGTGGAGAAGG CCCTGCAGGCCGCATATGGCGCCAGCGCCCCAGTGTGACCTCGGCTGCCCTCCGGTGGATGTACCACCACTCAC ${\tt CAACAGAGGGAGGGCCCTTGGAGCCGGCTGTCGTGGATGCCTTTAATCAAGCCTGGCATTTGGTTGCTCACGAAT}$ $\tt GTCCCAACTACTTCCGCTAGGCCCATCATGGCTCAGGCTGCCCAAGGCTTTTCTGTCACCTCTTTTGTTCTCTCA$ ${\tt CACTGACCAGTCTTGGCCTTAAGCTGACTTAGAAGGGTTTTTCTGAATTGTCTAGATCCATGCATTATTTTTCTA}$ AATAAAGCAGGCACTTGACCTGGCTGTAGCCTAGGTCTTGAGTGAACCCCAAAAAA

76/6881 FIGURE 72

MSRPPPPRVASVLGTMEMGRRMDAPASAAAVRAFLERGHTELDTAFMYSDGQSETILGGLGLGGGDCRVKIAT KANPWDGKSLKPDSVRSQLETSLKRLQCPQVDLFYLHTPDHGTPVEETLHACQRLHQEGKFVELGLSNYASWEVA EICTLCKSNGWILPTVYQGMYNATTRQVETELFPCLRHFGLRFYAYNPLAGGLLTGKYKYEDKDGKQPVGRFFGN SWAETYRNRFWKEHHFEAIALVEKALQAAYGASAPSVTSAALRWMYHHSQLQGAHGDAVILGMSSLEQLEQNLAA TEEGPLEPAVVDAFNQAWHLVAHECPNYFR

77/6881 FIGURE 73

 ${\tt ACCGTCTTCCGCCGCACGTGGATTCAGCGCG} \underline{{\tt ATC}} {\tt CCCAAATCCAAGCGCGACAAGAAAGTCTCCTTAACCAAAAC}$ TGCCAAGAAAGGCTTGGAATTGAAACAAAACCTGATAGAAGAGCTTCGGAAATGTGTGGACACCTACAAGTACCT TTTCATCTTCTCTGTGGCCAACATGAGGAACAGCAAGCTGAAGGACATCCGGAACGCCTGGAAGCACAGCCGGAT GTTCTTTGGCAAAAACAAGGTGATGATGGTGGCCTTGGGTCGGAGCCCATCTGATGAATACAAAGACAACCTGCA CCAGGTCAGCAAAAGGTTGAGGGGTGAGGTGGGTCTCCTGTTCACCAACCGCACAAAGGAAGAGGTGAATGAGTG GTTCACGAAATACACAGAAATGGACTACGCCCGAGCTGGTAACAAAGCAGCTTTCACTGTGAGCCTGGATCCAGG GCCCTGGAGCAGTTCCCCCACTCCATGGAGCCACAGCTCAGGCAGCTGGGCCTGCCCACCGCCCTCAAGAGAGG TGTGGTGACTCTGCTGTCTGACTACGAGGTGTGCAAGGAGGGCGATGTGCTGACCCCAGAGCAGGCTCGCGTCCT GAAGCTTTTTGGGTATGAGATGGCTGAATTCAAGGTGACCATCAAATACATGTGGGATTCACAGTCGGGAAGGTT ${\tt CCAGCAGATGGGAGACGACTTGCCAGAGAGGCGCATCTGAGTCCACAGAAGAGTCAGACTCAGAAGATGATGAC{\tt TG}}$ **A**AAGGGACTCGGGACTGAAGGTCTCCTGGAAGCTTCTGGGTCTCACTGGACCATCAGGACTGCTGCCGCCCCTCT GGAGAGAGCAGCTTTTTATTTGTCTGTAGACAGGGAACATGATGGGCACTGACCTCCTGTAAAGAATAAAACTGT GGGCCGGGCGCGGTGGCTCACGCCTGGAATCCCAGCACTTTGGGAAGCCGAGGTGGGCAGATCATAAGGTCAGGA TGGCATGTGCCTGTAGTCCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCACTTGAACCCGGGAGGTGGAGGTTG CCGTGAGTTGAGATTGGACCACTGCTCTCCAGCCTGGGCAACAGAGTAAAACTCTGTCCC

78/6881 FIGURE 74

MPKSKRDKKVSLTKTAKKGLELKQNLIEELRKCVDTYKYLFIFSVANMRNSKLKDIRNAWKHSRMFFGKNKVMMV ALGRSPSDEYKDNLHQVSKRLRGEVGLLFTNRTKEEVNEWFTKYTEMDYARAGNKAAFTVSLDPGPLEQFPHSME PQLRQLGLPTALKRGVVTLLSDYEVCKEGDVLTPEQARVLKLFGYEMAEFKVTIKYMWDSQSGRFQQMGDDLPES ASESTEESDSEDDD

79/6881 FIGURE 75

GAGTCGGGGGTCACCAGGCCTATCCTTGGCGCCACAGTCGGCCACCGGGGCTCGCCGCCGTCATGGAGAGCGGAG GGCGGCCCTCGCTGTGCCAGTTCATCCTCCTGGGCACCACCTCTGTGGTCACCGCCGCCCTGTACTCCGTGTACC GGCAGAAGGCCCGGGTCTCCCAAGAGCTCAAGGGAGCTAAAAAAAGTTCATTTGGGTGAAGATTTAAAGAGTATTC TTTCAGAAGCTCCAGGAAAATGCGTGCCTTATGCTGTTATAGAAGGAGCTGTGCGGTCTGTTAAAGAAACGCTTA ACAGCCAGTTTGTGGAAAACTGCAAGGGGGTAATTCAGCGGCTGACACTTCAGGAGCACAAGATGGTGTGGAATC CCCACGAGGATGGCGTGGATGTGCCGAGTGCTGAAGCCCCTGGACTCAGTGGATCTGGGTCTAGAGACTG TGTATGAGAAGTTCCACCCTCGATTCAGTCCTTCACCGATGTCATCGGCCACTACATCAGCGGTGAGCGGCCCA AAGGCATCCAAGAGACCGAGGAGATGCTGAAGGTGGGGGCCACCCTCACAGGGGTTGGCGAACTGGTCCTGGACA ACAACTCTGTCCGCCTGCAGCCGCCCAAACAAGGCATGCAGTACTATCTAAGCAGCCAGGACTTCGACAGCCTGC TGCAGAGGCAGGAGTCGAGCGTCAGGCTCTGGAAGGTGCTGGCGCTGGTTTTTGGCTTTGCCACATGTGCCACCC TCTTCTTCATTCTCCGGAAGCAGTATCTGCAGCGGCAGGAGCGCCTGCGCCTCAAGCAGATGCAGGAGGAGTTCC AGGAGCATGAGGCCCAGCTGCTGAGCCGAGCCAAGCCTGAGGACAGGGAGAGTCTGAAGAGCGCCTGTGTAGTGT GTCTGAGCAGCTTCAAGTCCTGCGTCTTTCTGGAGTGTGGGCACGTTTGTTCCTGCACCGAGTGCTACCGCGCCCT TGCCAGAGCCCAAGAAGTGCCCTATCTGCAGACAGGCGATCACCCGGGTGATACCCCTGTACAACAGCTAATAGT TTGGAAGCCGCACAGCTTGACCTGGAAGCACCCCTGCCCCCTTTTCAGGGATTTTTATCTCGAGGCCTTTGGAGG CTCCAATGGCAGGATGCTGCCTTTCCCACCTGAGAGGGGACCCTGTCCATGTGCAGCCTCATCAGAGCCTCACCC TGGGAGGATGCCGTGGCGTCTCCTCCCAGGAGCCAGATCAGTGCGAGTGTGACTGAAAATGCCTCATCACTTAAG GACTTGGTGGAGGACTCAGAGGGGAGGAAAGGCTGGGCCCCGAGTACAACGGATGCCTTGGGTGCTGCCTCCGAA ${\tt CAGGTCAACTTGTGTTCCCTTCACCTGCTTGCCTCCTTAACGCCTGCACGTGTGTAGAGGACAAAAGA}$ AAGTGAAGTCAGCACATCCGCTTCTGCCCAGATGGTCGGGGCCCCGGGCAACAGATTGAAGAGAGATCATGTGAA GGGCAGTTGGTCAGGCAGGCCTCCTGGTTTCGCCACTGGCCCTGATTTGAACTCCTGCCACTTGGGAGAGCTCGG GGTGGTCCCTGGTTTTCCCTCCTGGAGAATGAGGCGCAGAGGCCTCGCCTCCTGAAGGACGCAGTGTGGATGCCA CTGGCCTAGTGTCCTGGCCTCACAGCTTCCTTGCAAGGCTGTCACAAGGAAAAGCAGCCGGCTGGCACCCTGAGC ATATGCCCTCTTGGGGCTCCCTCATCCAGCCCGTCGCAGCTTTGACATCTTGGTGTACTCATGTCGCTTCTCCTT GTGTTACCCCTCCCAGTATTACCATTTGCCCCTCACCTGCCCTTGGTGAGCCTTTTAGTGCAAGACAGATGGGG CTGTTTTCCCCCACCTCTGAGTAGTTGGAGGTCACATACACAGCTCTTTTTTTATTGCCCTTTTCTGCCTCTGAA TGTTCATCTCTCGTCCTCTTTGTGCAGGCGAGGAAGGGGTGCCCTCAGGGGCCGACACTAGTATGATGCAGTGT CCAGTGTGAACAGCAGAAATTAAACATGTTGCAACC

80/6881 FIGURE 76A

GCGGCAGAGCTCGGCGGCTGGGACTGGAGGACAGCGGTGGCGGAGCGACTAGCGGCGGCGGGAGCGGCGCGAG AGGCCGTGCGGGACGCGGGCCAGGACCGGCCGAACGCAGAGGTTGATTCTTCACCACACTGAAACCATTAGGA AAAATCCTTGTGGTTAACAGCAGAGGCTTCAGAGTGTAACCTGTACTCGGGCCTAGAAATTATTTAAAATGGCGA CTGATACGTCTCAAGGTGAACTCGTCCATCCTAAGGCACTCCCACTTATAGTAGGAGCTCAGCTGATCCACGCGG ACAAGTTAGGTGAGAAGGTAGAAGATAGCACCATGCCGATTCGTCGAACTGTGAATTCTACCCGGGAAACTCCTC CCAAAAGCAAGCTTGCTGAAGGGGAGGAAGAAAAGCCAGAACCAGACATAAGTTCAGAGGAATCTGTCTCCACTG TAGAAGAACAAGAGAATGAAACTCCACCTGCTACTTCGAGTGAGGCAGAGCAGCCAAAGGGGGAACCTGAGAATG AAGAGAAGAAAATAAGTCTTCTGAGGAAACCAAAAAGGATGAGAAAGATCAGTCTAAAGAAAAGGAGAAGA TGGCTTCTTCCCCACGTCCCAAGATGGATGCAATCTTAACTGAGGCCATTAAGGCATGCTTCCAGAAGAGTGGTG CATCAGTGGTTGCTATTCGAAAATACATCATCCATAAGTATCCTTCTCTGGAGCTGGAGAGAAGGGGTTATCTCC TTAAACAAGCACTGAAAAGAGAATTAAATAGAGGAGTCATCAAACAGGTTAAAGGAAAAGGTGCTTCTGGAAGTT CAGAACCACAAGTAAAATTGGAGGATGTCCTCCCACTGGCCTTTACTCGCCTTTGTGAACCTAAAGAAGCTTCCT ACAGTCTCATCAGGAAATATGTGTCTCAGTATTATCCTAAGCTTAGAGTGGACATCAGGCCTCAGCTGTTGAAGA ACGCTCTGCAGAGAGCAGTAGAGAGGGGCCAGTTAGAACAGATAACTGGCAAAGGTGCTTCGGGGACATTCCAGC TGAAGAAATCAGGGGAGAAACCCCTGCTTGGTGGAAGCCTGATGGAATATGCAATCTTGTCTGCCATTGCTGCCA TGAATGAGCCGAAGACCTGCTCTACCACTGCTCTGAAGAAGTATGTCCTAGAGAATCACCCAGGAACCAATTCTA CAGATGATTCTAGAGATGAGGATGAAGATGAAGATGAGTCATCAGAAGAAGACTCTGAGGATGAAGAGCCGCCAC CTAAGAGAAGGTTGCAGAAGAAAACCCCAGCCAAGTCCCCAGGGAAGGCCGCATCTGTGAAGCAGAGAGGGTCCA AACCTGCACCTAAAGTCTCAGCTGCCCAGCGGGGAAAGCTAGGCCCTTGCCTAAGAAAGCACCTCCTAAGGCCA AAACGCCTGCCAAGAAGACCAGACCCTCATCCACAGTCATCAAGAAACCTAGTGGTGGCTCCTCAAAGAAGCCTG CAACCAGTGCAAGAAAGGAAGTAAAATTGCCGGGCAAGGGCAAATCCACCATGAAGAAGTCTTTCAGAGTGAAAA AGTAAATTTTATAGGAAAAAAGGGTATCATGATGAAATTCAAAATCTTATTTTCTAAGGTCAGTGTGCATTTGTT TCCTGGACTTTCCTAAACTATGTAATGTATACTTGTCCTTTTTCTCTGCCTCCCCAACCCCCTGTTGTTTTTAT GGTCAGCTTTGCCTTTTTTTTTTCTTCCAATTTTATCTAAACAGTTGCAGAGATTTTTATATTTGTAGAAAGCAT AACTGTAAACACAGAGACAGCTTTGGGAATAAGCCAAAAACAGGGTGATCTCATTAGATTTTGAAGATATATGAC TCCTTTGGGCTACATTTCATATTGATCAATTTCTAGGTATTTTTCACTGGCCCAAAGTATTGCATTCCCTTAACA GCAAGCACAAGTTCTCTATATCACTTGTTTTTTTGTTGTTGTTGTTGTTGTCGTCGTTGTTTTGAGACGGAGTCTT GCTCAGGTGCCCCGGAGTGCAGTGGTGCAATCTCAGCTCACCTGCAACCTCCACCTCCTGGGTTCAAGCAATTCTC CAAAGTGCTGGGATTACAGGAGTGAGCCACTGTGCCTGGCCTATCCCACTTGGTTTTTGACTGAAGGGGAAGTGT TATTATTATTTTTTGAGACAGAGTCTCGCTCTGTCGCCCAGTGTGGAGTGCAGTGGTGATCTTGGCTCACT GCAAACTCCGCCTCCCAGGTTCAAGCGATTCTCCCACCTCAGCCTCCTGAGTTGGGTCCTACAGGCGCACACGAC CACGCCCAGCTAATTTTTTGTATTTTTAGTAGAGTTGGGGTTTCACCATGTTAGCCAGGATGGTCTCGATCTCCT GACCTCGTGATCCACTCACCTCAGCCTCCCAAAATCCTGGGGTTACAGATGTGAGCTACCACTCACGGCCCAAAT CTTCTTGATCATATGTTTAAATATTTTTTAATATTTGGAGCATGAGTTGTCACTTCTTGTTTGCCTTTTTTAT AAGGAAATGTTGGAGAGTTACATCATTGCTAATGTAGAAATGTTAAGTGGAAAAATATACAGTTTGGTAAAATAA CTTCCTTTTTGAGATATTAAAAAAAAAAAAGGAAAAAGGTAAATGAAGCCCAACTACCTAACCCTTCTTA

81/6881 FIGURE 76B

TGAGCGCCCAGCAAGTTCGTGCTGGTGGTGGCGGGCCCGGTGTGCTTCATGCTCATCTTGTACCAGTACGCGGG CGTGATCGTCTTCCTGCACATCCAGAAGACGGGCGCACCACCTTCGGCCGCCACCTCGTGCAGAACGTACGCCT CGAGGTGCCGTGCGACTGCCGGCCGGCCAGAAGAAGTGCACCTGCTACCGGCCCAACCGCCGAGACTTGGCT CTTCTCCCGCTTCTCCACCGGCTGGAGCTGCGGGCTGCACCGACTGGACCGAGCTCACCAACTGCGTGCCCGG CGTGCTGGACCGCCGCGCTCCGCCGCCCCCCGCACGAAGTTCTACATCACCCTGCTACGAGACCC CGTGTCCCGCTACCTGAGCGAGTGGCGGCATGTGCAGAGGGGTGCCACGTGGAAGACGTCGTTGCACATGTGTGA TGGGCGCACGCCCACGCCTGAGGGGCTGCCGCCCTGCTACGAGGGCACGGACTGGTCGGGCTGCACGCTACAGGA GTTCATGGACTGCCCGTACAACCTGGCCAACAACCGCCAGGTGCGCATGCTGGCCGACCTGAGCCTGGTGGGCTG CTACAACCTGTCCTTCATCCCCGAGGGCAAGCGGGCCCAGCTGCTGCTCGAGAGCGCCCAAGAAGAACCTGCGGGG CATGGCCTTCTTCGGCCTGACCGAGTTCCAGCGCAAGACGCAGTACCTGTTCGAGCGGACGTTCAACCTCAAGTT CGAGGAGCTCAACGACCTGGACATGCAGCTGTATGACTACGCCAAGGACCTCTTCCAGCAGCACTACCAGTACAA GCGGCAGCTGGAGCGCAGGGAGCAGCGCCTGAGGAGCCGCGAGGAGCGTCTGCTGCACCGGGCCAAGGAGGCGCT GCCGCGGGAGGACGCCGACGAGCCGGGCCGCGTGCCCACCGAGGACTACATGAGCCACATCATTGAGAAGTGGTA GTGGCGGTGGTGGCCACGGGGAGGCCTCTTGGGGTGTGTGGGGGGATAAAACAGGACAGACGACAGGTCCACCCAA TAGTGGGGCTGGGCAGGGATGGGGCTTGAGAAATCAACAGGTGCAGCCCAGTGGGTCAGAGGAAAGCGTGCTCGA AGGATGCCATGGTCAGGGCAGAGCCTCCAGAGCAGGTGTTGTGCCTGGAGCTGCTCCTCGGCCTCCTTGGATTT ATCGCAAAAACTGAAGGTTTGCGTGAGAGACGAGGACAGCGGAAAGTGGACCTGCCAGGCCGGGAGTGTCCCT CACCAACTATGCACACACCACTCGCTCTTAGCTCCTCTGTCCGGGCTACTAGGAGTGAGACCAGCTTCTGGCAAC TGCCCCAGCTCCAGGCCATCCCATAGCTCCTCTTCTGGCTGCCCCCAATGCCCCGAGGCCTGGGGAGCCCCC AGCTCACCCATCTGTAGCTCCCTCAAAGTCAGGGCCCACCCCATCTGAGGCAGAGAGACTCGAGTCCAGCCCCC AGGAAGCCTGCTCCCCTCTCGGCCCATGGTCCTGCTTCATGCTTTGGGTCAGGAGGCCAAAGCTGATGTTCAGG CCCCACCCACTCCCTACAGTCCTCAGACC

83/6881 FIGURE 78

AGAAACTCCCGGTGTGGCAGCTGAGATGGCCCAGGAAAGAACTATATTACCTTCAAAAAGAGAGGGTACATGCGAT GTTTGAGGTGGCATGAAGCTCAGTGGTGTTATATTGGAATGAGTGACCATCCTGGAGCCTTCCTGAAAGAG CAGGGATAAAGCAGGTCTTGGGGTGCACCATGATTTCACCATTCTTAGTACTGGCCATTGGCACCTGCCTTACTA ACTCCTTAGTGCCAGAGAAAGAGAAAGACCCCAAGTACTGGCGAGACCAAGCGCAAGAGACACTGAAATATGCCC TGGAGCTTCAGAAGCTCAACACCAACGTGGCTAAGAATGTCATCATGTTCCTGGGAGATGGGATGGGTGTCTCCA CAGTGACGGCTGCCCGCATCCTCAAGGGTCAGCTCCACCACAACCCTGGGGAGGAGACCAGGCTGGAGATGGACA AGTTCCCCTTCGTGGCCCTCTCCAAGACGTACAACACCAATGCCCAGGTCCCTGACAGTGCCGGCACCGCCACCG ${\tt CCTACCTGTGGGGGTGAAGGCCAATGAGGGCACCGTGGGGGGTAAGCGCACCACTGAGCGTTCCCGGTGCAACA}$ CCACCCAGGGGAACGAGGTCACCTCCATCCTGCGCTGGGCCAAGGACGCTGGGAAATCTGTGGGCATTGTGACCA CCACGAGAGTGAACCATGCCACCCCAGCGCCGCCTACGCCCACTCGGCTGACCGGGACTGGTACTCAGACAACG AGATGCCCCTGAGGCCTTGAGCCAGGGCTGTAAGGACATCGCCTACCAGCTCATGCATAACATCAGGGACATTG ACGTGATCATGGGGGGGGGCCGGAAATACATGTACCCCAAGAATAAAACTGATGTGGAGTATGAGAGTGACGAGA AAGCCAGGGGCACGAGGCTGGACGCCTCGTTGACACCTGGAAGAGCTTCAAACCGAGATACAAGCACT AGCCAGGGGACATGCAGTACGAGCTGAACAGGAACAACGTGACGGACCCGTCACTCTCCGAGATGGTGGTGGTGG ATGAAGGAAAAGCCAAGCAGGCCCTGCATGAGGCGGTGGAGATGGACCGGGCCATCGGGCAGCAGCAGCTTGA GTGGCAACTCTATCTTTGGTCTGGCCCCCATGCTGAGTGACACAGACAAGAAGCCCTTCACTGCCATCCTGTATG ${\tt GCAATGGGCCTGGCTACAAGGTGGTGGGCGGTGAACGAGAATGTCTCCATGGTGGACTATGCTCACAACAACT}$ ACCAGGCGCAGTCTGCTGTGCCCCTGCGCCACGAGACCCACGGGGGGGAGGACGTGGCCGTCTTCTCCAAGGGCC $\verb|CCATGGCGCACCTGCTGCACGGCGTCCACGAGCAGAACTACGTCCCCCACGTGATGGCGTATGCAGCCTGCATCG|\\$ CCCTCTACCCCTGAGCGTCCTGTTCTGAGGGCCCAGGGCCCGGGCACCCACAAGCCCGTGACAGATGCCAACTT CCCACACGGCAGCCCCCCCTCAAGGGGCAGGGAGGTGGGGGCCTCCTCAGCCTCTGCAACTGCAAGAAAGGGGA CCCAAGAACCAAAGTCTGCCGCCCACCTCGCTCCCCTCTGGAATCTTCCCCAAGGGCCAAACCCACTTCTGGCC TGCAGACATTCTCAAAGCCTCTTATTTTTCTAGCGAACGTATTTCTCCAGACCCAGAGGCCCTGAAGCCTCCGTG GAACATTCTGGATCTGACCCTCCCAGTCTCATCTCCTGACCCTCCCATCTCCTTACCTCTGGAACCCCC CAGGCCCTACAATGCTCATGTCCCTGTCCCCAGGCCCAGCCCTCCTTCAGGGGAGTTGAGGTCTTTCTCCTCAGG ACAAGGCCTTGCTCACTCACTCCAAGACCACCAGGGTCCCAGGAAGCCGGTGCCTGGGTGGCCATCCTACC CACAAAACATTTAAATAAAACTTTCCAAATATTTCCGAGG

FIGURE 79

85/6881 FIGURE 80

DRTQRERGEAPNRMFSRPFRKHGVVPLATYMRIYKKGDIVDIKGMGTVQKGTPHKCYHGKTGRVYNVIQYAASIV VNKQVKGKILAKRINVRIEHIKHSESRDSFLKRVKENDQKKREAKEKGTWVQLKRQPAPPSKAHFVRTNGKEPEL LEPILYEFTA

FIGURE 81

GGCAGCCGAGGAGACCCCGCGCAGTGCTGCCAACGCCCCGGTGGAGAAGCTGAGGTCATCATCAGATTTGAAATA TTTAAAGTGGATACAAAATTATTTCAGCAATGCAGACAATTAAGTGTGTTGTTGTGGGCGATGGTGCTGTTGGTA AAACATGTCTCCTGATATCCTACACAACAAACAAATTTCCATCGGAATATGTACCGACTGTTTTTGACAACTATG CAGTCACAGTTATGATTGGTGGAGAACCATATACTCTTGGACTTTTTGATACTGCAGGGCAAGAGGATTATGACA GATTACGACCGCTGAGTTATCCACAAACAGATGTATTTCTAGTCTGTTTTTCAGTGGTCTCTCCATCTTCATTTG CTGCTGAAAAGCTGGCCCGTGACCTGAAGGCTGTCAAGTATGTGGAGTGTTCTGCACTTACACAGAAAGGCCTAA AGAATGTATTTGACGAAGCAATATTGGCTGCCCTGGAGCCTCCAGAACCGAAGAAGAGCCGCAGGTGTGTGCTGC ${\tt TA} \underline{{\tt TGA}} {\tt ACATCTCTCCAGAGCCCTTTCTGCACAGCTGGTGTCGGCATCATACTAAAAGCAATGTTTAAATCAAACT}$ AAAGATTAAAAATTAAAATTCGTTTTTGCAATAATGACAAATGCCCTGCACCTACCCACATGCACTCGTGTGAGA CAAGGCCCATAGGTATGGCCCCCCCCTTCCCCCTCCCAGTACTAGTTAATTTTGAGTAATTGTATTGTCAGAAAA GTTGTTTAAAAGGAAGGCATGCTTGTGGATGACTCTGTAACAGACTAATTGGAATTGTTGAAGCTGCTCCCTGGT GTGTGTGTGGGGGTTTGTTTTTAGTCTTGTTTTTTTAATTCATTAACCAGTGGTTAGCCCTTAAGGGGAGGAGGA TATAGTAAATGCCTCATTTAATAACATACTCCTTTTTGAAAGTTGCCTTTTCTCTCCACCCTTGAGTAGATCCAG TATTTGATGAAACTCATGAAAGTGGGTGGAGCCCATCTTGCCCCTCCTCTTTTCTAGGACGCACTATATGTGACT GTGACTTTCAAGGACATTTGTTTGCCATTTGCTGATTTTTTTGGGAAGTTAATTTCTAACTTCTTCACTGATAA ATGAAGAAAGTATTGCACCTTTGAAATGCACCAAATGAATTGAGTTTGTAATTAAAAAAATTTTTTCCCTTTC AGTCATTGTCTTATATGCTTAGCATAGATTTGCAGCTCAGTAGTATATGGTGTTCCTAGAATGCAGCTGAAGACC GGAGGATGGAGGCCTGCTTCATTAAGAAGCTGGGGGTAGGGTGGGGGTGGGGAGAACACTTAACAACATGGGGAC CAGTCAGGGGAATCCCCTTATTTCTGTTTTGCATATGAGGAACCCTAGAGCAGCCAGGTGAGGCTCTCTAGTTTA ATAAAAATCATGGAAAGACTCTTAATGCAGACTCTTCTTAAGTGTTAATAGGGATTTTTTCAGCTTATTTTGGTT GCAGTTTCCAATTTTTAAAAATGTTGAGGTAATCTTTCCCACCTTCCCAAACCTAATTCTTGTAGATGCATTAGT AAAAAAA

87/6881 FIGURE 82

 ${\tt MQTIKCVVVGDGAVGKTCLLISYTTNKFPSEYVPTVFDNYAVTVMIGGEPYTLGLFDTAGQEDYDRLRPLSYPQTDVFLVCFSVVSPSSFENVKEKWVPEITHHCPKTPFLLVGTQIDLRDDPSTIEKLAKNKQKPITPETAEKLARDLKAVKYVECSALTQKGLKNVFDEAILAALEPPEPKKSRRCVLL$

CGCGCGCCCATTTCTAGTCGTTTTCAAAGCGCCTCGCGCTGATTCTCACGGGCCCGGCTGCCGGCCCCCGCTCT CTTGATGAAATATTTCAGACAGGATTGGTAGCTTATGTCGATCTTGATGAAAGAGCAATTGATGCTCTCAGGGAA TTTAATGAAGAAGGAGCTCTGTCTGTACTACAGCAGTTCAAGGAAAGTGACTTATCACATGTTCAGAACAAAAGT GCATTTTTATGTGGAGTTATGAAGACCTACAGGCAGAGAGAAACAGGGGAGCAAGGTGCAAGAGTCCACAAAG GGACCTGATGAAGCGAAGATCAAGGCCTTGCTTGAGAGAACTGGTTATACTCTGGATGTAACCACAGGACAGAGG AAGTATGGTGGTCCTCCACCAGACAGTGTGTACTCTGGCGTGCAACCTGGAATTGGAACGGAGGTATTTGTAGGC AAAATACCAAGGGATTTATATGAGGATGAGTTGGTGCCCCTTTTTGAGAAGGCCGGACCCATTTGGGATCTACGT CTTATGATGGATCCACTGTCCGGTCAGAATAGAGGGTATGCATTTATCACCTTCTGTGGAAAGGAAGCTGCACAG GAAGCCGTGAAACTGTGTGACAGCTATGAAATTCGCCCTGGTAAACACCTTGGAGTGTGCATTTCTGTGGCAAAC AACAGACTTTTTGTTGGATCCATTCCGAAGAATAAGACTAAAGAAAACATTTTGGAAGAATTCAGTAAAGTCACA GAGGGTTTGGTGGACGTTATTCTCTATCATCAACCCGATGACAAAAAGAAGAATCGGGGGGTTCTGCTTCCTTGAA TATGAGGATCACAAGTCAGCAGCACAAGCCAGACGCCGGCTGATGAGTGGAAAAGTAAAAGTGTGGGGAAATGTA GTTACAGTTGAATGGGCTGACCCTGTGGAAGAACCAGATCCAGAAGTCATGGCTAAGGTAAAAGTTTTGTTGTG AGAAACTTGGCTACTACGGTGACAGAAGAATATTGGAAAAGTCATTTTCTGAATTTGGAAAACTCGAAAGAGTA AAGAAGTTGAAAGATTATGCATTTGTTCATTTTGAAGACAGAGGAGCAGCTGTTAAGGCTATGGATGAAATGAAT GGCAAAGAATAGAAGGGGAAGAATTGAAATAGTCTTAGCCAAGCCACCAGACAAGAAAAGGAAAGAGCGCCAA GCTGCTAGACAGGCCTCCAGAAGCACTGCGTATGAAGATTATTACTACCACCCTCCTCCTCGCATGCCACCTCCA ATTAGAGGTCGGGGTCGTGGTGGGGGGAGAGGTGGATATGGCTACCCTCCAGATTACTACGGCTATGAAGATTAC TATGATGATTACTATGGTTATGATTATCACGACTATCGTGGAGGCTATGAAGATCCCTACTACGGCTATGATGAT $\verb|CCACCTCCAAGAGGTAGAGCTGGCTATTCACAGAGGGGGGCACCTTTGGGACCACCAAGAGGCTCTAGGGGTGGC|\\$ AGAGGGGGTCCTGCTCAACAGCAGAGGGCCGTGGTTCCCGTGGATCTCGGGGCAATCGTGGGGGCAATGTAGGA TCCCAACCCATCGCTCAGCAGCCGCTTCAGCAAGGTGGTGACTATTCTGGTAACTATGGTTACAATAATGACAAC CAGGAATTTTATCAGGATACTTATGGGCAACAGTGGAAG<mark>TAG</mark>ACAAGTAAGGGCTTGAAAATGATACTGGCAAGA TGCCATTTGTATTGGGCTGAAGAATCACTATTGTGTATATACTCAAGTCTTTTTATTTTTCCTCTTTTCATAAA TGCTCTTGGACATTATTGGGCTTGCAGAGTTCCCTTATTCTGGGGATTACAATGCTTTTATCGTTTCAGGCTTCA TTTTAGCTTCAAAACAAGCTGGGCACACTGTTAAATCATGATTTTGCAGAACCTTTGGTTTTGGACAGTTTCATT AGTAGTTTTAAGAAATTAAAGCAAACAAATTTAAGTTTTCTTGTATTGAAAATAACCTATGATTGTATGTTTTGC ATTCCTAGAAGTAGGTTAACTGTGTTTTTAAATTGTTATAACTTCACACCTTTTTGAAATCTGCCCTACAAAATT TGTTTGGCTTAAACGTCAAAAGCCGTGACAATTTGTTCTTTGATGTGATTGTATTTCCAATTTCTTGTTCATGTA AGATTTCAATAAAACTAAAAAATCTATTCAAAACATTA

89/6881 FIGURE 84

MANQVNGNAVQLKEEEPMDTSSVTHTEHYKTLIEAGLPQKVAERLDEIFQTGLVAYVDLDERAIDALREFNEEG ALSVLQQFKESDLSHVQNKSAFLCGVMKTYRQREKQGSKVQESTKGPDEAKIKALLERTGYTLDVTTGQRKYGGP PPDSVYSGVQPGIGTEVFVGKIPRDLYEDELVPLFEKAGPIWDLRLMMDPLSGQNRGYAFITFCGKEAAQEAVKL CDSYEIRPGKHLGVCISVANNRLFVGSIPKNKTKENILEEFSKVTEGLVDVILYHQPDDKKKNRGFCFLEYEDHK SAAQARRRLMSGKVKVWGNVVTVEWADPVEEPDPEVMAKVKVLFVRNLATTVTEEILEKSFSEFGKLERVKKLKD YAFVHFEDRGAAVKAMDEMNGKEIEGEEIEIVLAKPPDKKRKERQAARQASRSTAYEDYYYHPPPRMPPPIRGRG RGGGRGGYGYPPDYYGYDDYYGYDYHDYRGGYEDPYYGYDDGYAVRGRGGGRGGRGAPPPPRGRGAPPPRG RAGYSQRGAPLGPPRGSRGGRGGPAQQQRGRGSRGSRGNRGGNVGGKRKADGYNQPDSKRRQTNNQQNWGSQPIA QQPLQQGGDYSGNYGYNNDNQEFYQDTYGQQWK

91/6881 FIGURE 86

 ${\tt MKALSPVRGCYEAVCCLSERSLAIARGRGKGPAAEEPLSLLDDMNHCYSRLRELVPGVPRGTQLSQVEILQRVIDYILDLQVVLAEPAPGPPDGPHLPIQTAELTPELVISNDKRSFCH}$

 $\label{thm:constraint} \mbox{\tt MAQDQGEKENPMRELRIRKLCLNICVGESGDRLTRAAKVLEQLTGQTPVFSKARYTVRSFGIRRNEKIAVHCTVR} \\ \mbox{\tt GAKAEEILEKGLKVREYELRKNNFSDTGNFGFGIQEHIDLGIKYDPSIGIYGLDFYVVLGRPGFSIADKKRRTGC} \\ \mbox{\tt IGAKHRISKEEAMRWFQQKYDGIILPGK} .$

GGAAGTTCCGGCGGGGGGGCCGAGGGGGAAGAGTGTGTCTGCGGGAGAAAGAGGAGAATCGCCCAAGCGGCCTC GGAAGTCCCAGGGAGTGGAGGCCCCGCCGTGGAGCCGTGTGGTGTATCTGTGGTAACACCATGTCTGTGCCCCT GCTCACCGATGCTGCCACCGTGTCTGGAGCTGAGCGGGAAACGGCCGCGGTTATTTTTTTACATGGACTTGGAGA CACAGGGCACAGCTGGGCTGACGCCTCTCCACCATCCGGCTCCCTCACGTCAAGTACATCTGTCCCCATGCGCC TAGGATCCCTGTGACCCTCAACATGAAGATGGTGATGCCCTCCTGGTTTGACCTGATGGGGCTGAGTCCAGATGC TGGCAGTGCCAAGGACCTGGCCATACTCCAGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGC CCTGACGGCTGAGAAGCTCCGGTCTGTTGTCACACCTGCCAGGGTCCAGTTCAAGACATACCCGGGTGTCATGCA $\texttt{CAGCTCCTGTCCTCAGGAGATGGCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCTCCTGTC} \underline{\textbf{TAA}} \texttt{CTAGTCGC}$ GAGCCCCTGTCCCACCCTTCCTGACCTGTCCTTTTCCCACAGGCCTCTGGGGGCAGGTGGCAAGGCCTGGCCGG GCCTTCCTTCCTGGCCTTAGCCACCTGGCTCTGTCTGCAGCAGGGGCAGGCTGCTTTCTTATCCATTTCCCTGGA GGCGGGCCCCCTGGCAGCAGTATTGGAGGGGCTACAGGCAGCTGGAGAAAGGGGCCCAGCCGCTGACCCACTCA CTCAGGACCTCACTAGCCCCGCTTTGGGCCCCCTCCTGTGACCTCAGGGTTTGGCCCATGGGGCCCCCCCA GGCCCCTGCCCCAACTGATTCTGCCCAGATAATCGTGTCTCCTGCCTCCACTCAGCTGCTTCTCAGTCATGAATG TGGCCATGGCCCCGGGGTCCCCTTGCTGCTGTGGGCTCCCTGTCCCTGGGCAGGAGTGCTGGTGAGGAGGTGGAG CCTTTTGAGGGGGCCCTCCCTCAGCTGTTTCCCCACACTGGGGGGCCTGGGCCCTGCCTCCCGTTACCCTCCTT $\tt CCCTGCAGGCCTGGAGCCTGTAGGGCTGGACTGAGGTTCAGGTCTCCCCCCAGCTGTCTCACCCCCACTTTGTCC$

95/6881 FIGURE 90

MCGNTMSVPLLTDAATVSGAERETAAVIFLHGLGDTGHSWADALSTIRLPHVKYICPHAPRIPVTLNMKMVMPSW FDLMGLSPDAPEDEAGIKKAAENIKALIEHEMKNGIPANRIVLGGFSQGGALSLYTALTCPHPLAGIVALSCWLP LHRAFPQAANGSAKDLAILQCHGELDPMVPVRFGALTAEKLRSVVTPARVQFKTYPGVMHSSCPQEMAAVKEFLE KLLPPV



96/6881 FIGURE 91

CGTGCCTCGTCTCCCTGGAAAGGGAGGGAGGCTTCGACGTCGAGAGGGAGCCGCTGCCGCGTTAGTTCCGAGC TTGAAGTCACTAGGACTTCTCTCAAACTTGTGTGCTGAGGAGACTCAGATGTTGGCCTCAGCTCCTAGGCTGAAC TGGGCTTGCAGCAAGGAAGAGACAGGTAGTGGAGATCCTGCAATCTGAAAAGCAGACTGAAAGGTGACAAAGA AGCTGAAG<u>ATG</u>GGTGGTGGAGAGAGGTATAACATTCCAGCCCCTCAATCTAGAAATGTTAGTAAGAACCAACAAC GTTATAACTCATCAGCAGCTGCCTGGCAGGCCATGCAAAATGGGGGGGAAGAACAAAAATTTTCCAAATAATCAAA GTTGGAATTCTAGCTTATCAGGTCCCAGGTTACTTTTTAAATCTCAAGCTAATCAGAACTATGCTGGTGCCAAAT TTAGTGAGCCGCCATCACCAAGTGTTCTTCCCAAACCACCAAGCCACTGGGTCCCTGTTTCCTTTAATCCTTCAG ATAAGGAAATAATGACATTTCAACTTAAAACCTTACTTAAAGTACAGGTATAAAATAAGACAAATGTTTAAATTT AGTTATGTTCACGGATAGTTGTCAATTGGTCTGAAACAAATTCGCTAGGGAATCTATTTGTGTAGAACTAATTAA TGTAAAAAAACAGACCATCTCGTGTTGTGTGCACTGTGATATAATGGTAGTATCAGTGCAACTTTAATGATTGT ACTTGATATTAAGTGTTCTCAACTGAGTAACTTTTAAGTGGAAACCAAGTTTAGATTTGGGGAGTGGTAAAGGAA CGGATTATAAGCTTCTAGCTAACACAAGGATTCAGAATTAGGTAAACATCTGAAGGTTTAGTATATTAGAAACAC AATTGTACAGTGGGTGGAAAGGGCATTTGGAGCTCATTAGAATGAGACATAGTACACCCCAATGGCCCTGTTTAT TAAATGTAGTGGATTAAGTGTCTGTCAACAAATACACCAAAACCATTTTTTATAGAAACAGTATTTAATGGTCAC TCAATAGCTTTCAAAATACATTTTTGTATTACAGCACTGCACAAGCTATTCTAATAGTGCTCTCGCCTCATCATT CCTGCAAAGCTTGCTTTGGGGAGTTGGATAATGTGAAAATTTTAAGTACCTAGGGGAGAAAGAGCCATGTAAATA TCTGTAATAAACTTGTAGCATATGTAAAGTTTTCTTGGCCTTTATCTTACAAAAATGGAGTATTTTAGTATGAAT TTGCTGAATGTAAGACCGTGGACTGTTTTTTATAATATGGCCTAATTTTAAAGGTCCAAAATAACTTGTTTTTAA AGTTTGCCCTTGTGCTAAAGTGCCAGTGTATGTATGTTATACTTGATTTGGTTGTAAACTATATTTCAAAGTAAA CCCTAGTGTAATAAGTTTTATAACTAAAAAGGTTTAAGCTGCTAAAACTATTTTTAAGAGATGTGAAATGCAGTA TGGGACTATCTTTTTTCCTCCTCTAAGCCCAAAGATTAACTAGAGTCCCTCCAACCTTATAGATTGTTGGCTTT GTAGGTGCAACCCAATGGACCACTTATGCAAAAGATGTAAACTCTTGCATAATACATTGATAACATGTTTTGCCA ACTITAAATGCTTAAACATAAGCGAAACCAGTAGCAAGTATGTGGGTCAGCTTAAAAATTTTGATTGTTAATGCC AAGATGAAGTACTGCCCAAGTTAAATATTGATAGCCTAAAGACAAGTTTATGTAGTACTTAATGTACATGATATG

 ${\tt MGGGERYNIPAPQSRNVSKNQQQLNRQKTKEQNSQMKIVHKKKERGHGYNSSAAAWQAMQNGGKNKNFPNNQSWNSSLSGPRLLFKSQANQNYAGAKFSEPPSPSVLPKPPSHWVPVSFNPSDKEIMTFQLKTLLKVQV}$

98/6881 FIGURE 93

GTCTGAGGCTCGGCCGCCTGAGCCGCGGACGGTTTGCTGAGCCCGTTAGTGCGCCCGGCCGAGACACGCCGCCGC CATGTCCCGCTACCTGCGTCCCCCAACACGTCTCTGTTCGTCAGGAACGTGGCCGACGACACCAGGTCTGAAGA CTTGCGGCGTGAATTTGGTCGTTATGGTCCTATAGTTGATGTTGTTCCACTTGATTTCTACACTCGCCGTCC AAGAGGATTTGCTTATGTTCAATTTGAGGATGTTCGTGATGCTGAAGACGCTTTACATAATTTTGGACAGAAAGTG GATTTGTGGACGGCAGATTGAAATACAGTTTGCCCAGGGGGATCGAAAGACACCAAATCAGATGAAAGCCAAGGA AGGGAGGAATGTGTACAGTTCTTCACGCTATGATGATTATGACAGATACAGACGTTCTAGAAGCCGAAGTTATGA AAGGAGGAGATCAAGAAGTCGGTCTTTTGATTACAACTATAGAAGATCGTATAGTCCTAGAAACAGTAGACCGAC TGGAAGACCACGGCGTAGCAGAAGCCATTCCGACAATGATAGACCAAACTGCAGCTGGAATACCCAGTACAGTTC TGCTTACTACACTTCAAGAAAGATC**TGA**AAGCGGAAAAAGAACCAAAGAAGGGCCAGTTCAAGCGACCAAAGGGTG GGTGGAAGGTGCTGCAGTATGAATACTGTACGAATATTTTGACTCTGGTCTGAAAAGATAAAAGAATGTTATCGA AAACTACATGGAATAATTGAAGTCCCTTCAAGTTTGAAAGTAAGCATTTTAGGACAAATAAAAGGAAATTCAACT TTGTACTTGTGGAAACTAATCCCTAAATATGAATAGGTTTATATTGATTCATGGGTAACAGGTCCATAATAAATT ACTGAATTGGGTGGGAAAAGGTATGGTCCAATATAAAAGTTCCATTTTTGCCATTATTGGCAAATCTTGCCTTTG TGCAGTTTACATCTGTCTTAACTACTCCTTCCCAGGTAAATTCCAATTATATTTGACATCCAGCTAACAGGGCCC ACTGGATAATTGAGAAAAATAGATAATTCCCTTATTCAGTAAATGTCTACTGAGCACAATCTAGTGAATCATTAC AGTATGGCCTCATTGTTTTGTTTGAGGTGTGTTATTCATAACAATATTTTACACCATTCGTATCAATGTAATTAT AGAACACAATATACGATCAAGGATAAGTAATTGTGTGGTTATCTGCCATTTAAAAGTATCCAGTATTTGATCACA TTATTATAAATAATGAAAAAATGATTTAATCTGTAATAAACTGGTTTATTGTGCAGTGACTGTAATATACTAGAG TTATAATAAATTGTTTACTCTGCCTCACCAAACACATGCTAGGATATAACCCCCAAAATAAGTATTTAACTTTGC TAGTATGTTCTGTAATTGAGAAAATGTTCACCAAATTATACTTTTTAGTGATTTACATGTACATTTTATAGGGGA CATGTTCTGTGTATAGCGAATAAATAACTTTTATAGTATCAC

MSRYLRPPNTSLFVRNVADDTRSEDLRREFGRYGPIVDVYVPLDFYTRRPRGFAYVQFEDVRDAEDALHNLDRKW ICGRQIEIQFAQGDRKTPNQMKAKEGRNVYSSSRYDDYDRYRRSRSRSYERRRSRSRSFDYNYRRSYSPRNSRPT GRPRRSRSHSDNDRPNCSWNTQYSSAYYTSRKI

100/6881 FIGURE 95

GTCTGAGGCTCGGCCGCCTGAGCCGCGGACGGTTTGCTGAGCCCGTTAGTGCGCCCGGCCGAGACACGCCGCCGC $C\underline{ATG}$ TCCCGCTACCTGCGTCCCCCAACACGTCTCTGTTCGTCAGGAACGTGGCCGACGACACCAGGTCTGAAGA CTTGCGGCGTGAATTTGGTCGTTATGGTCCTATAGTTGATGTTGTTCCACTTGATTTCTACACTCGCCGTCC AAGAGGATTTGCTTATGTTCAATTTGAGGATGTTCGTGATGCTGAAGACGCTTTACATAATTTGGACAGAAAGTG GATTTGTGGACGGCAGATTGAAATACAGTTTGCCCAGGGGGATCGAAAGACACCAAATCAGATGAAAGCCAAGGA AGGGAGGAATGTGTAÇAGTTCTTCACGCTATGATGATTATGACAGATACAGACGTTCTAGAAGCCGAAGTTATGA AAGGAGGAGATCAAGAAGTCGGTCTTTTGATTACAACTATAGAAGATCGTATAGTCCTAGAAACAGTAGACCGAC TGGAAGACCACGGCGTAGCAGAAGCCATTCCGACAATGATAGATTCAAACACCGAAATCGATCTTTTTCAAGATC ATCTCACACCAAAACTAGAGGCACCTCTAAAACAGATTCCAAAACACATTATAAGTCTGGCTCAAGATATGAAAA GGAATCAAGGAAAAAAGAACCACCTAGATCCAAATCTCAGTCAAGATCACAGTCTAGGTCTAGGTCAAAATCTAG ATCAAGGTCTTGGACTAGTCCTAAGTCCAGTGGCCAC<u>TGA</u>TAGTATAAACCATGGTCATTTTTAGGCATGTATCA TTCATTTACTCATAGTTTGGTTTACTTAAATTATCAGGAATACAATGTTGCAATGATGCTTAAAAAAACACTTGTT AGTTTTCCCTGTACCAGGCAATGGTTATAATTAAAATGATATGCTGTTGAGAAGCCACTCTTAAGAGTCCAGTTT GTTTAATGTTATGGGCAGCTACCAATTTGTGGTGTCTCTGTATATTTTTGTAAAGATTCTCATTTTTATGCTTG AAGTATTTGGTGAAAAGATGTTGGTTGACCATAATTTGCAACATTGTCTCATTAAAAATAAACTTTCATATTCAT ATTTGGTAGAACTGTTAACCTAGAAATGTAGCTTGCTAATAAGATAGAATGATACAAAAGTGAAGTAGTAGCCAC AGTACAACACTGACTGCTCAGACACATTTAGGTTCAGGGTGGACCTTTATGTCTTGTCAAGATGTCTAGGCCCGG CTGGGCGTGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCGAGGCGGGGGGGATCACGAGGTCAGGAGTT CGAGACCAGCCTGACCAACACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTATCCGGGCATGGTGGCACA TGCCTGTAATCTCAGCTACTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACCTGGGAGGTAGAAGTTGCAGTGAG TCTAGGCCAATGATAATTATTTTGATGCAGTGTGGATTAGTTCTTTTGTTAACCCCACTGTCTTGGGGAATGAT GCCAGCTGGGAAATTGAGTTTTTGACTGAAACATGGAGCCTTCACTGCTTTTTTTCTGGTTCCTATGAAGATTTG GAACATAGAAAACACAAAAACTCACCTTAAAATTTGAGCAGGTCGTTGATGGCAAAAATAATTTTAAGGAAAAAG GAATATTCTTATGTAGTTATTCTAAAGTTTAAGGAGCGTTGTTGACCATAATATTGCTTAGTTTTCTTACTGCTG TTTATTTAATACGAGGCAAGTTGTAAGACAACACTCATTCTAGGTGATTCTGTGGTGCCATGAAATTTAAGGTAA TTTGGGGAAAAGGATTAGTCAGTTTTAAGCAAGAGTCACATCTTTTGAGCTTTCGATTATCAGTGTAGTACCTGA CTAAAAATGAAGTAATACCCTTAAACCATTTATAATTTCTAGTATTTCTCTGAAAGATCGTTTTGGGGACAAAAG TACAAGTACGAATTATGGACAAACGATTCCTTTTAGAGGATTACTTTTTTCAATTTCGGTTTTAGTAATCTAGGC TTTGTATATTTGATAGTATTTCTAACTTTCATTTCTTTACTGTTTGCAGTTAATGTTCATGTTCTGCTATGCAAT CGTTTATATGCACGTTTCTTTAATTTTTTTAGATTTTCCTGGATGTATAGTTTAAACAACAAAAAGTCTATTTAA AACTGTAGCAGTAGTTTACAGTTCTAGCAAAGAGGAAAGTTGTGGGGTTAAACTTTGTATTTCTTTATAGA GGCTTCTAAAAAGGTATTTTTATATĞTTCTTTTTAACAAATATTGTGTACAACCTTTAAAAACATCAATGTTTGGA TCAAAACAAGACCCAGCTTATTTTCTGCTTGCTGTAAATTAAGCAAACATGCTATAATAAAAACAAAATGAAGG

101/6881 FIGURE 96

MSRYLRPPNTSLFVRNVADDTRSEDLRREFGRYGPIVDVYVPLDFYTRRPRGFAYVQFEDVRDAEDALHNLDRKW ICGRQIEIQFAQGDRKTPNQMKAKEGRNVYSSSRYDDYDRYRRSRSRSYERRRSRSRSFDYNYRRSYSPRNSRPT GRPRRSRSHSDNDRFKHRNRSFSRSKSNSRSRSKSQPKKEMKAKSRSRSASHTKTRGTSKTDSKTHYKSGSRYEK ESRKKEPPRSKSQSRSQSRSRSKSRSRSWTSPKSSGH

AGGAACGAGATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGCGGTGCCCAAGGAGGCCGAGCTGGCTCCAAGGCT
GCATCTCTCCACTGGACTAGCGAGAGGGTTGTCAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAAT
CCTTGCTCTGCGACGACTATTCCCTGGCTGCAGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTT
ACTGACTATGTTCATGGGGATGCCTCGCAGAAAGCTGCCAAGGCAGGGCTTTTGGCATTTTCAGCTTTAACCTTT
GCTGGGCTTTGCTATTTCAACTATCACGATGTGGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCT
TTTTGACTTCCTACTTTGAAGAATTGATGTATGCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAA
GGAAGAAATAACAGATAAGTCCATTGGTGGACAGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAATTTAACT
TTGAGGGAAAAGGTTTGAGAGGAATTATATTTAAGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTT
GCCTCCCAGCTTCTTATAAGACTCACAGTATAACTAAACATGATATATCAGCTTTTTGCCTTTTAATTTCCAATC
TCTTAAAGAGAATC

CAGGAACGAGATGGCGGTTCCCTGGAGGCTGAGTGCCGTTTGCGGTGCCCAAGGAGGCCGAGCTCTGTTGCTGCG GCACATACACTTGTCACCGAGCCACCATTCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGGGTTGT CAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGACGGACTATTCCCTGGCTGC AGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTTACTGATTATGTTCATGGGGGATGCCTCGCAGAA AGCTGCCAAGGCAGGCTTTTGGCATTTTCAGCTTTAACCTTTGCTGGGCTTTGCTATTTCAACTATCACGATGT GGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCTTTTTGACTTCCTACTTTGAAGAATTGATGTAT GCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAAGGAAGAAATAACAGATAAGCCCATTGGTGGAC AGCCTTCTTCTCTAATCACAAGATTATTTTCAGAATTTAATCTTTGAGGAAAAGGTTTGAGAGGAATTATATCT AAGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTTGCCTCCCAGCTTCTTATAAGACTCACAATAT AACTAAACATGATATATCAGCTTTTGCCTTTTAATTTCTCAATCTCTTAAAGAGAATCCAGCTTTATTATGATTA GTACATGATCAAATTTCCATATTTGCCTTGGGAATAATGGACAAAGGGAAATACTCTTAATTCATGAATAAAAAC TTTGCAGAAAATTAGACAGTGTTTAATTTTCAAAAACTTCCCTCTCTAGTCAGTAGATACCACCTACTGATGGTT ACATATACTAGGGAAATTTTAAAATTAGGAAATGCTGCTATCTCATATTATAAATTTCTAAATCCTAGGAAGAAA CGCTTGGAGTGCTTCTGAAGATACAGAAGTTCCATTTAAGGGCAAGTTTCCCCAGAGACATATCAAAATATTATC CATTGTAAACTGAGATTTAATTCTCAAATGTATTCTACTTGTTCTAAAACAATCTGTCCACAAATATAAAACTAT AAGTAATAAATTGTTATTTCCGCACAATGGGAATCTCTAATGTGAAAATGTATTCTATGAAAAATAATTTTTTTAA ATAAAATGTTGTATAAAAAAA

FIGURE 99

AGAGAGAAAGGTTGTGATGGCGGCTATAGCTGCATCCGAGGTGCTGGTGGACAGCGCGGAGGAGGGGTCCCTCGC TGCGGCGGGGGGGCTGGCCGCTCAGAAGCGCGAACAGAGACTGCGCAAATTCCGGGAGCTGCACCTGATGCGGAA TGAAGCTCGTAAATTAAATCACCAGGAAGTTGTGGAAGAAGATAAAAGACTAAAATTACCTGCAAATTGGGAAGC TGAGAAAGTGAAGTTGCTGGAGATCAGTGCAGAAGATGCAGAAAGATGGGAGAGAAAAAGAAGAAGAAGAAAAAACCC TGATCTGGGATTTTCAGATTATGCTGCTGCCCAGTTACGCCAGTATCATCGGTTGACCAAGCAGATCAAACCTGA CATGGAAACATATGAGAGACTGAGAGAAAAACATGGAGAAGAGTTTTTCCCAACATCCAATAGTCTTCTTCATGG AACACATGTGCCTTCCACAGAGGAAATTGACAGGATGGTCATAGATCTGGAAAAACAGATTGAAAAACGAGACAA ATATAGCCGGAGACGTCCTTATAATGATGATGCAGATATCGACTACATTAATGAAAGGAATGCCAAATTCAACAA GAAAGCTGAAAGATTCTATGGGAAATACACAGCTGAAATTAAACAGAATTTGGAAAGAGGAACAGCTGTC<u>TAA</u>TC CCTTCAAGAACTGTTTATAGAAGCTTGAGAATGGGGTAAAAATTTCTGCTAGCAAAATCAAGTTCTTTTTGAAAT CGTATATCCTTTCATGTATATTTCCACATTTTTGTGCTTGGATATAAGATGTATTTCTTGTAGTGAAGTTGTTTT GTAATCTACTTTGTATACATTCTAATTATTATTTTTCTATGTATTTTAAATGTATATGGCTGTTTAATCTTTG AAGCATTTTGGGCTTAAGATTGCCAGCAGCACACATCAGATGCAGTCATTGTTGCTATCAGTGTGGAATTTGATA GAGTCTAGACTCGGGCCACTTGGAGTTGTGTACTCCAAAGCTAAGGACAGTGATGAGGAAGATGGCAGTGGCCAC CGGAGGACTGGAGCAGTCCCTCATGGCGGCCTGTGACCAAGGTCGGGGAGGAGTGGAGCTATCCTTCCATGA

105/6881 FIGURE 100

MAAIAASEVLVDSAEEGSLAAAAELAAQKREQRLRKFRELHLMRNEARKLNHQEVVEEDKRLKLPANWEAKKARL EWELKEEEKKKECAARGEDYEKVKLLEISAEDAERWERKKKRKNPDLGFSDYAAAQLRQYHRLTKQIKPDMETYE RLREKHGEEFFPTSNSLLHGTHVPSTEEIDRMVIDLEKQIEKRDKYSRRRPYNDDADIDYINERNAKFNKKAERF YGKYTAEIKQNLERGTAV

FIGURE 101A

GGCGGCCCACTCTGCTCTGTCAGCTTCGGAGCTCCTCCACCCTGGCTGCCGAAAGCCCCTTCCCGCCATCTAATG ATACACTCTGCATACGCTTCTGTTGAGAATTTGTGGCTAGACATTCCTGTGGGACCGGGAATCCAAATTCTTGGT AGCTAGAGGAAAAAAAAAAAAAAACAACAGCCAACCAAGTGAATCCCAACCCAACCCCTGAAGGGCTGAAAATTC TCGCCTTCTTCAGAGCGGGGCATGGCATCGAACAGCATCTTCGACTCCTTCCCGACCTACTCGCCGACCTTCATC GGCGAGAACAGCGGCGCGCTGAGCGCGCAGGCGGCCGTGGGGCCCGGAGGGCGCCCGGAGGTGCGCTCG ATGGTGGACGTGCTGGCGGACCACGCAGGCGAGCTCGTGCGCACCGACAGCCCCAACTTCCTCTGCTCCGTGCTG CCCTCGCACTGGCGCTGCAACAAGACGCTGCCCGTCGCCTTCAAGGTGGTGGCATTGGGGGACGTGCCGGATGGT ACGGTGGTGACTGTGATGGCAGGCAATGACGAGAACTACTCCGCTGAGCTGCGCAATGCCTCGGCCGTCATGAAG AACCAGGTGGCCAGGTTCAACGACCTTCGCTTCGTGGGCCGCAGTGGGCGAGGGAAGAGTTTCACCCTGACCATC CCCAGACGGCACCGGCAGAAGCTGGAGGACCAGACCAAGCCGTTCCCTGACCGCTTTGGGGACCTGGAACGGCTG CAGACCCCAATCCAAGGCACCTCGGAACTGAACCCATTCTCCGACCCCCGCCAGTTTGACCGCTCCTTCCCCACG CTGCCAACCCTCACGGAGAGCCGCTTCCCAGACCCCAGGATGCATTATCCCGGGGCCATGTCAGCTGCCTTCCCC TACAGCGCCACGCCTCGGGCACGAGCATCAGCAGCCTCAGCGTGGCGGGCATGCCGGCCACCAGCCGCTTCCAC CATACCTACCTCCCGCCACCCTACCCGGGGGCCCCGCAGAACCAGAGCGGGCCCTTCCAGGCCAACCCGTCCCCC TACCACCTCTACTACGGGACATCCTCTGGCTCCTACCAGTTCTCCATGGTGGCCGGCAGCAGCAGTGGGGGGGCGAC CGCTCACCTACCCGCATGCTGGCCTCTTGCACCAGCAGCGCTGCCTCTGTCGCCGGCGGCAACCTCATGAACCCC AGCCTGGGCGGCCAGAGTGATGGCGTGGAGGCCGACGGCCACAGCAACTCACCCACGGCCCTGAGCACGCCA GGCCGCATGGATGAGGCCGTGTGGCGGCCCTACTGACCGCCCTGGTGGACTCCTCCCGCTGGAGGCGGGGACCCT CGGTCCCAGGTGGTCCCAGCTGGTGGGAGCCTCTGGCTGCATCTGTGCAGCCACATCCTTGTACAGAGGCATAG GTTACCACCCCACCCGGCCCGGGATACTGCCCCCGGCCCAGATCCTGGCCGTCTCATCCCATACTTCTGTGGG GAATCAGCCTCCTGCCACCCCCGGGAAGGACCTCACTGTCTCCAGCTATGCCCAGTGCTGCATGGGACCCATGT CTCCTGGGACAGAGCCATCTCTCTCCAGAGAGAGGCAGCATTGGCCCACAGGATAAGCCTCAGGCCCTGGGAA ACCTCCCGACCCTGCACCTTCGTTGGAGCCCCTGCATCCCCTGGGTCCAGCCCCCTCTGCATTTACACAGATTT GAGTCAGAACTGGAAAGTGTCCCCCACCCCCACCACCCTCGAGCGGGGTTCCCCTCATTGTACAGATGGGGCAGG ACCCAGCACGCTGCTGGCAGAGATGGTTTGAGAACACATCCAAGCCAGTCCCCCAGCCCAGCTTCCCCTCCGTT CCTAACTGTTGGCTTTCCCCCAGCCGCACGGGTCCCAGGCCCCAGAGAAGATGAGTCTATGGCATCAGGTTCTTA AACCCAGGAAAGCACCTACAGACCGGCTCCTCCATGCACTTTACCAGCTCAACGCATCCACTCTCTGTTCTCTTG GCAGGGCGGGGGGGGGATAGGAGGTCCCCTTTCCCCTAGGTGGTCTCATAATTCCATTTGTGGAGAGAACAG GAGGGCCAGATAGATAGGTCCTAGCAGAAGGCATTGAGGTGAGGGATCATTTTGGGTCAGACATCAATGTCCCTG TCCCCCCTGGGTCCAGCCAAGCTGTGCCCCATCCCCAAGCCTCCTGGGAGGATCCAGCCAAATCTTGCGACTCC AAAACAAAAAAAAACAAAACAGTTTTTAAAACTGATTTTAGAAAAAGAAGCTTAATCTAACGTTTTCAAACACA AGGTCTCTTACAGGTATAGTTCCGTGATTATGATAGCTCTGTGATTATAAGCAACATCCCCGCCCCCTCTCCCCC CCGCGGACCCCCAGCTGCCTCCTGAGGGTGTGGGGTTATTAGGGTCTCAATACTTTCTCAAGGGGCTACACTCCC CATCAGGCAGCATCCCACCAGCCTGCACCACAGGCTCCCCTGGGAGGACGAGGGAAACGCTGATGAGACGCTGGG CATCTCTCTCTGTGGCTCTAGGACATCTGTCCAGGAGGCTGGGCGGAGGTGGGCAGGATGTGAGAGGTGGGGAG TACTGGCTGTGCGTGGCAGACAGAAGCACTGTAAAGGGCTCTCCAGCCGCAGCTCAGCTGCACTGCGTTCCGAG GTGAAGTCTTGCCCCTGAATTTTGCAAAATGGGAAAGTGGGCGCTTGCCCAAGGGCCAGGCTGCATGGATTCTCA CATCAGAGTTCTCTGGCCCTAGAAAGGCTTAGAAAAGGCGTAAGGGAACTCATAAAGGCTAGCAGCATGCGGTAT TTTAACTTTCTGCCTCGGCCTCTGTGGATGCAGAAATCTGCCCTACAAAATGCTCTTCATTGGTTGTCTCTGTGA GAGCACTGTCCCCACCCAACCTGTCACAACGGCCAGAACCATACACCAGAGACACACTGGCAGGTTAGGCAGTCC TTCTGGTGATCCTATTCCATTCCCTCCTGCTGCGGTTTCTCTTGGCCTGTCCTCACTGGAAAAACAGTCTCCATC TCCTCAAAATAGTTGCTGACTCCCTGCACCCAAGGGGCCTCTCCATGCCTTCTTAGGAAGCAGCTATGAATCCAT TGTCCTTGTAGTTTCTTCCCTCCTGTTCTCTGGTTATAGCTGGTCCCAGGTCAGCGTGGGAGGCACCTTTGGGTT

FIGURE 101B

108/6881 FIGURE 102

GCACATACACTTGTCACCGAGCCACCATTCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGGGTTGT CAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGACGGACTATTCCCTGGCTGC AGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTTACTGACTATGTTCATGGGGATGCCTCGCAGAA AGCTGCCAAGGCAGGCTTTTGGCATTTTCAGCTTTAACCTTTGCTGGGCTTTGCTATTTCAACTATCACGATGT GGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCTTTTTGACTTCCTACTTTGAAGAATTGATGTAT GCCTCTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAAGGAAGAAATAACAGATAAGTCCATTGGTGGAC AGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAATTTAACTTTGAGGGAAAAGGTTTGAGAGGAATTATATTTA AGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTTGCCTCCCAGCTTCTTATAAGACTCACAGTATA ACTAAACATGATATATCAGCTTTTGCCTTTTAATTTCTCAATCTCTTAAAGAGAATCCAGCTTTAGTATGATTAG CATATGATCAAACTTCCATATTTGCCTTGGGAATAATGGACTAAGGGAAATACTCTTAATTCATGAATAAAAACT TTGCAGAAAATTAGACAGTGTTTAATTTTCAAAAACTTCCCTCTCTAGTCGGTAGATACCACCTACCGATGGTTA CATATACTAGGGAAATTTTAAAATTAGGAAATGCTGATATCTCATATTATAAATTTCTAAATCCTAGGAAGAAAC GCTTGGAGTGCTTCTGAAGATACAGAAGTTCCATTTAAGGGCAAGTTTCCCCATAGACGTATCAAAATATTACCC ATTGTAAACTGAGATTTAATTCTCAAATGTATTCTACTTGTTCTAAAACAATCTGTCCACAAATATAAAACTATA AAAATGTTGTATAATAA

FIGURE 103

AGGAACGAGATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGCGGTGCCCAAGGAGGCCGAGCTGGCTCCAAGGCT
GCATCTCTCCACTGGACTAGCGAGAGGGTTGTCAGTGTTTTGCTCCCGGGTCTGCTTCCGGCTGCTTATTTGAAT
CCTTGCTCTGCGACGACGACTATTCCCTGGCTGCAGCCCTCACTCTTCATGGTCACTGGGGCCTTGGACAAGTTGTT
ACTGACTATGTTCATGGGGGATGCCTCGCAGAAAGCTGCCAAGGCAGGGCTTTTGGCATTTTCAGCTTTAACCTTT
GCTGGGCTTTGCTATTTCAACTATCACGATGTGGGCATCTGCAAAGCTGTTGCCATGCTGTGGAAGCTCTGACCT
TTTTGACTTCCTACTTTGAAGAATTGATGTATGCCTCTTTTGCCTCTGCTTTGTCATGCCATTAAGCTCACAATAA
GGAAGAAATAACAGATAAGTCCATTGGTGGACAGCCTTCTTCTCTTAATCACAAGATTATTTTCAGAATTTAACT
TTGAGGGAAAAGGTTTGAGAGGAATTATATTTAAGTTGTGAGACTGAGTTCTGTATTCTGGTGAGTTAATGGGGTT
GCCTCCCAGCTTCTTATAAGACTCACAGTATAACTAAACATGATATATCAGCTTTTTGCCTTTTAATTTCTCAATC
TCTTAAAGAGAATC

FIGURE 104

 ${\tt MAVLRRLSALYGAQGGRALLLRTPVIRPAHISAFLQDRPIPEWCGVQHLHLSPSHHPGSKAASLHWTSERVVSVLLGLLPAAYLNPCSAMDYSLAATLTLPGHWGLRQVVTMFMGMPRRKLPRQGFWHFQL}$

FIGURE 105

AGTGTGGTCAGGCGGCTCGGACTGAGCAGGACTTTCCTTATCCCAGTTGATTGTGCAGAATACACTGCCTATCGC $\verb|TTGTCTTCTATTCACC| \textbf{ATG} \\ \texttt{GCTTCTTCTGATATCCAGGTGAAAGAACTGGAGAAGCGTGCCTCAGGCCAGGCTTT} \\$ TGAGCTGATTCTCAGCCCTCGGTCAAAAGAATCTGTTCCAGAATTCCCCCTTTCCCCTCCAAAGAAGAAGAATCT TTCCCTGGAGGAAATTCAGAAGAAATTAGAAGCTGCAGAAGAAGACGCAAGTCCCATGAAGCTGAGGTCTTGAA GCAGCTGGCTGAGAAACGAGAGCACGAGAAAGAAGTGCTTCAGAAGGCAATAGAAGAGAACAACAACTTCAGTAA AATGGCAGAAGAGAAACTGACCCACAAAATGGAAGCTAATAAAGAGAACCGAGAGGCACAAATGGCTGCCAAACT GGAACGTTTGCGAGAGAAGGATAAGCACATTGAAGAAGTGCGGAAGAACAAAGAATCCAAAGACCCTGCTGACGA ${ t GACTGAAGCTGAC}$ GCCAGTGTCATTTTATTTTTTCCCTCCTGACAAATATTTTAGAAGCTAATGTAGGACTGTATAGGTAGATCCAGA TCCAGACTGTAAGATGTTGTTTTAGGGGCTAAAGGGGAGAAACTGAAAGTGTTTTACTCTTTTTCTAAAGTGTTG GTCTTTCTAATGTAGCTATTTTTCTTGTTGCATCTTTTCTACTTCAGTACACTTGGTGTACTGGGTTAATGGCTA GTACTGTATTGGCTCTGTGAAAACATATTTGTGAAAAGAGTATGTAGTGGCTTCTTTTGAACTGTTAGATGCTGA ATATCTGTTCACTTTTCAATCCCAATTCTGTCCCAATCTTACCAGATGCTACTGGACTTGAATGGTTAATAAAAC TGCACAGTGCTGTTGGTGGCAGTGACTTCTTTTGAGTTAGGTTAATAAATCAAGCCATAGAGCCCCTCCTGGTTG ATACTTGTTCCAGATGGGGCCTTTGGGGCTGGTAGAAATACCCAACGCACAAATGACCGCACGTTCTCTGCCCCG CTGTTACTTTCTTCAGATGTTTATTTGCAAACAACCATTTTTTGTTCTGTGTCCCTTTTAAAAGGCAGATTAAA ACAGGTGGGGCATGTCCTCATCCTTTCCTGCCATAAAAGCTATGACACGAGAATCAGAATATTAATAAAACTTTA TGTACTGCTGT

112/6881 FIGURE 106

 ${\tt MASSDIQVKELEKRASGQAFELILSPRSKESVPEFPLSPPKKKDLSLEEIQKKLEAAEERRKSHEAEVLKQLAEK}$ ${\tt REHEKEVLQKAIEENNNFSKMAEEKLTHKMEANKENREAQMAAKLERLREKDKHIEEVRKNKESKDPADETEAD}$

 $\texttt{CGAGTGAGGGATTTCGCCGCCCGCTTTCAGGCCCGTTTGGCTTAAATAACTGTGATTG} \underline{\textbf{ATG}} \\ \texttt{CCATGCAGGAGAA} \\$ ATATCCAACTGAGGGGATCTCTCACGTCACTTCACCGAGTTCCGATGTGATTCAGAAGGGCAGTTCCCTGGGGAC TGAATGGCAGACCCCAGTTATCTCGGAGCCCTTTCGGAGCCGCTTCAGCCGCTGTTCAAGTGTAGCCGACAGTGG GGACACAGCCATTGGTACATCATGCTCAGATATTGCGGAGGATTTTTGCAGCTCAAGTGGCAGTCCTCCTTTCCA GCCCATCAAAAGCCACGTAACCATTCCAACAGCCCATGTGATGCCTTCTACTTTAGGGACCTCTCCTGCCAAGCC AAATTCTACACCTGTTGGACCCTCTTCCTCTAAACTCCCTTTGTCAGGGTTGGCTGAAAGTGTGGGAATGACAAG AAATGGAGACCTCGGTGCAATGAAACATTCTCCAGGCCTATCTAGAGATCTCATGTATTTCTCTGGTGCTACTGG AGAAAATGGAATTGAGCAGTCCTGGTTTCCAGCAGTGGGCCATGAAAGACAAGAAGAGGCGAGGAAGTTTGATAT TCCTAGCATGGAATCTACCCTCAATCAGTCGGCAATGATGGAGACACTTTATTCAGATCCTCACCACCGAGTCCG CTTCCACAACCCAAGAACCAGCACAAGTAAGGAGTTGTACAGAGTGTTGCCTGAGGCCAAGAAGGCACCGGGCAG CGGGGCAGTGTTTGAGCGGAATGGACCACATTCTAATAGCAGTGGGGTCCTCCCTTTGGGACTCCAGCCTGCTCC CGGGCACTCCAGCCAGCCTCTGCCCTCTCAGGTGTGGCAGCCGAGTCCTGACACTTGGCATCCCCGAGAGCAATC TTGTGAACTCAGCACTTGTCGGCAGCAGCTGGAATTGATTCGTTTACAGATGGAGCAAATGCAGCTTCAGAATGG AGCCATCTGCCACCATCCTGCTGCTTTTGGTCCTTCACTGCCCATCTTAGAGCCAGCACAGTGGATCAGCATCTT GAACAGTAATGAACACCTTCTGAAGGAAAAAGAGCTTCTCATTGACAAGCAGAGGAAACACATCTCTCAGCTGGA GCAGAAAGTGCGAGAGAGCGAACTGCAAGTCCACAGTGCCCTCTTGGGCCGCCCTGCCCCCTTTGGTGATGTCTG CTTGCTGAGGCTACAGGAATTGCAGCGAGAAAACACTTTCTTACGTGCACAGTTTGCACAGAAGACAGAAGCCTT GAGCAGAGAAAAGATTGACCTTGAAAAGAAACTCTCTGCTTCTGAAGTTGAAGTCCAGCTCATCAGAGAGTCGCT CAAAGTGGCGTTGCAGAAGCATTCTGAGGAAGTGAAGAACAGGAAGAAAGGGTCAAAGGTCGTGATAAACATAT CAATAATTTGAAAAAGAAATGCCAGAAGGAATCAGAGCAGAACCGGGAGAAGCAGCAGCGTATTGAGACCTTGGA GCGCTACCTGGCTGACCTGCCCACACTGGAAGACCATCAGAAGCAGAGCCAGCAGCTTAAGGATTCTGAGTTGAA GAGCACAGAGCTGCAGGAGAAAGTGACTGAGCTGGAGAGTTTGCTGGAGGAGACCCAGGCAATCTGCAGAGAGAA GGAGATTCAACTGGAAAGCCTGAGGCAGAGAGAAGCAGAATTCTCCTCCGCTGGACATAGCCTGCAAGATAAACA GTCTGTGGAGGAGCCAGTGGAGAGGTCCAGAAGTGGAAATGGAGTCCTGGCAGAAGCGATACGATTCGCTCCA AAAGATTGTGGAGAAGCAGCAGCAGAAGATGGATCAGTTGCGCTCACAAGTACAGAGCCTAGAGCAGGAAGTGGC GGCCCAACCAGGGTCTCCACCTTCACCAGACACGGCCCAGCTGGCACTTGAGCTGCACCAGGAGTTGGCCAGTTG CCTTCAAGATCTGCAGGCTGTCTGTAGCATTGTGACCCAGAGGGCCCAGGGCCATGACCCCAATCTCTCCCTGCT CCTGGGCATTCACTCACAGCACCCAGAGACTCAGCTAGATTTGCAGAAGCCAGATGTGATCAAGAGGAAACTAGA AGCAGGTTTCTGCCCTGACATTCTCTTGTCTGCTATTCCCAGAGAGGTCTCAGAGGGGAGGGGAGAGCCTGCATC TGGGGGCCAAGGGCTGATTAGGGAACTGTGTCCTACCCACACTGGCATGTTGGATTACGTTTGTCCTGTTAATTC ACTCTCGACGGTGAGTTACTAATTAACTTTTGGCAGGTACAACAGATAAGTCCTCACAAACTGTTCCCAGCCCTA TCACACCTTGGTCCTGATTAGAGAGCTCATCAGAGGGGCCTGGAAAGGCTGAGCAAGTACCAGTGACAATGG CCATTTAAGAATTCTCAGGCCCCATGTGCCAGCCTTCTTGGGAACTGAGCTGGCTTTCTGGGTTTTCTCATGCCT GGTCTTACTGCTTCTCCTCAGGGCTCTTGTTCTCCCAGAAGCCTCAGGGTAATGTGTTGGTTAGCACGTAACTA CTAGGATTGGGGCCCTAGGGATTATAGCCAGGACTCTAATCTGCCTACCATGCCATTTAACAAGAGATCCCACTC TCCAGCTGCCTTGTGTCCCTAGGGTCCTGGCCATGTGTTTAGTGTGCTAAACTTTCTCCTTTGTTCTCAGGCCTT CCAGGTAGTCCCCTTCCTGGACTTAAGAGTGCAAACTCTTCTCTGTGGTTCTAGCCTTGGGCAGAATTATATCCC AGAGACCACAGAGCAACTGTCAAGCTGCTTACCCCCTCACCCAGGGCTACAGCCTGTGCCCAGCCCTCTAATTTG TGCCTCTTGTGTTGGGGGGTGGGGGGTTATTCCTTTCCCTTTCCTGCTCTGGCCTCCTTGAAAGTTCAGAGT ACCCAGTACAAGTCAGCCACCATGCTGACGGGTATTTTTCCTCATAAAGTTTATAACCAGTTATTATATGAATC TTTGTTATGTCCATTTGTTTTGTATTGCGTATTTTGATTATAAAATAAAGTATCTTAACAG

FIGURE 108

MAMQEKYPTEGISHVTSPSSDVIQKGSSLGTEWQTPVISEPFRSRFSRCSSVADSGDTAIGTSCSDIAEDFCSSS
GSPPFQPIKSHVTIPTAHVMPSTLGTSPAKPNSTPVGPSSSKLPLSGLAESVGMTRNGDLGAMKHSPGLSRDLMY
FSGATGENGIEQSWFPAVGHERQEEARKFDIPSMESTLNQSAMMETLYSDPHHRVRFHNPRTSTSKELYRVLPEA
KKAPGSGAVFERNGPHSNSSGVLPLGLQPAPGHSSQPLPSQVWQPSPDTWHPREQSCELSTCRQQLELIRLQMEQ
MQLQNGAICHHPAAFGPSLPILEPAQWISILNSNEHLLKEKELLIDKQRKHISQLEQKVRESELQVHSALLGRPA
PFGDVCLLRLQELQRENTFLRAQFAQKTEALSREKIDLEKKLSASEVEVQLIRESLKVALQKHSEEVKKQEERVK
GRDKHINNLKKKCQKESEQNREKQQRIETLERYLADLPTLEDHQKQSQQLKDSELKSTELQEKVTELESLLEETQ
AICREKEIQLESLRQREAEFSSAGHSLQDKQSVEETSGEGPEVEMESWQKRYDSLQKIVEKQQQKMDQLRSQVQS
LEQEVAQEEGTSQALREEAQRRDSALQQLRTAVKELSVQNQDLIEKNLTLQEHLRQAQPGSPPSPDTAQLALELH
QELASCLQDLQAVCSIVTQRAQGHDPNLSLLLGIHSQHPETQLDLQKPDVIKRKLEEVQQLRRDIEDLRTTMSDR
YAQDMGENCVTQ

FIGURE 109

GTAGCAGCTTCTTCTCCGAACCAACCCTTTGCCTTCGGACTTCTCCGGGGCCAGCAGCCGCCCGACCAGGGGCCCC GGGGCCACGGGCTCAGCCGACGACCATGGGCTCCGTGTCCAACCAGCAGTTTGCAGGTGGCTGCGCCAAGGCGGC CCCCCAGTGGATGTCTTTGTGCACCAGAGTAAGCTGCACATGGAAGGGTTCCGGAGCTTGAAGGAGGGTGAGGC TATTGGGAGTGAGAGGCGCCAAAAGGAAAGAGCATGCAGAAGCGCAGATCAAAAGGAGACAGGTGCTACAACTG TGGAGGTCTAGATCATCATGCCAAGGAATGCAAGCTGCCACCCCAGCCCAAGAAGTGCCACTTCTGCCAGAGCAT CAGCCATATGGTAGCCTCATGTCCGCTGAAGGCCCAGCAGGGCCCTAGTGCACAGGGAAAGCCAACCTACTTTCG TTCTTTGCTATCAGGAAGTTTTGAGGAGCAGGCAGAGTGGAGAAAGTGGGAATAGGGTGCATTGGGGCTAGTTG GCACTGCCATGTATCTCAGGCTTGGGTTCACACCATCACCCTTTCTTCCCTCTAGGTGGGGGGAAAGGGTGAGTC AAAGGAACTCCAACCATGCTCTGTCCAAATGCAAGTGAGGGTTCTGGGGGGCAACCAGGAGGGGGGAATCACCCTA CAACCTGCATACTTTGAGTCTCCATCCCCAGAATTTCCAGCTTTTGAAAGTGGCCTGGATAGGGAAGTTGTTTTC CTTTTAAAGAAGGATATAATAATTACCCATGCCAGAGTGAAATGATTAAGTATAAGACCAGATTCATGGAGCCA CACTTTTGGGATAGGGTGCTGGCAGCTGTCCCAAGCAATGGGTAATGATGATGGCAAAAAGGGTGTTTGGGGGAA GGATACTGCACCTTGGGTCCCACTTTCTCCAGGATGCCAACTGCACTAGCTGTGCGAATGACGTATCTTGTGC ATTTTAACTTTTTTCCTTAATATAAATATTCTGGTTTTGTATTTTTGTATATTTTAATCTAAGGCCCTCATTTC CTGCACTGTGTTCTCAGGTACATGAGCAATCTCAGGGATAGCCAGCAGCAGCTCCAGGTCTGCGCAGCAGCAATT ACTITITGTTGTTTTTTGCCACCGTGGAGAGCAACTATTTGGAGTGCACAGCCTATTGAACTACCTCATTTTTGCC AATAAGAGCTGGCTTTTCTGCCATAGTGTCCTCTTGAAACCCCCTCTGCCTTGAAAATGTTTTATGGGAGACTAG GTTTTAACTGGGTGGCCCCATGACTTGATTGCCTTCTACTGGAAGATTGGGAATTAGTCTAAACAGGAAATGGTG GTACACAGAGGCTAGGAGAGGCTGGGCCCGGTGAAAAGGCCAGAGACCAAGCCAAGATTAGGTGAGGGTTGTCTA ATCCTATGGCACAGGACGTGCTTTACATCTCCAGATCTGTTCTTCACCAGATTAGGTTAGGCCTACCATGTGCCA CAGGGTGTGTGTGTTTGTAAAACTAGAGTTGCTAAGGATAAGTTTAAAGACCAATACCCCTGTACTTAATCCT GTGCTGTCGAGGGATGGATATATGAAGTAAGGTGAGATCCTTAACCTTTCAAAATTTTCGGGTTCCAGGGAGACA CACAAGCGAGGGTTTTGTGGTGCCTGGAGCCTGTGTCCTGCCCTGCTACAGTAGTGATTAATAGTGTCATGGTAG CAAATGCAATAGAACGCATTGGGTGTGTGTCTGATCCTGGGTTCTTGTCTCCCCTAAATGCTGCCCCCCAAG TTACTGTATTTGTCTGGGCTTTGTAGGACTTCACTACGTTGATTGCTAGGTGGCCTAGTTTGTGTAAATATAATG TATTGGTCTTTCTCCGTGTTCTTTGGGGGGTTTTGTTTACAAACTTCTTTTTGTATTGAGAGAAAAATAGCCAAAG CATCTTTGACAGAAGGTTCTGCACCAGGCAAAAAGATCTGAAACATTAGTTTGGGGGGCCCTCTTCTTAAAGTGG GGATCTTGAACCATCCTTTCTTTTGTATTCCCCTTCCCCTATTACCTATTAGACCAGATCTTCTGTCCTAAAAAAC GCTTGGAGTGTCTCCACAACTCTTAAATGATGTATGCAAAAATACTGAAGCTAGGAAAACCCTCCATCCCTTGTT GTCACCCAGGCAGAGGTTGCAGTGAGCTGAGATCGCACCACTGCACTCCAGCCTGGTTACAGAGCAAGACTCTGT AATCCTAAAGTAAAGAGATGCAATTGGGGGCCTTCCATGTAGAAAGTGGGGTCAGGAGGCCAAGAAAGGGAATAT GAATGTATATCCAAGTCACTCAGGAACTTTTATGCAGGTGCTAGAAACTTTATGTCAAAGTGGCCACAAGATTGT TTAATAGGAGACGAACGAATGTAACTCCATGTTTACTGCTAAAAACCAAAGCTTTGTGTAAAATCTTGAATTTAT GGGGCGGGAGGGTAGGAAAGCCTGTACCTGTCTGTTTTTTCCTGATCCTTTTCCCTCATTCCTGAACTGCAGGA GACTGAGCCCCTTTGGGCTTTGGTGACCCCATCACTGGGGTGTGTTTATTTGATGGTTGATTTTGCTGTACTGGG TACTTCCTTTCCCATTTTCTAATCATTTTTTAACACAAGCTGACTCTTCCCTTCCCTTCTCTTTCCCTGGGAAA ATACAATGAATAAATAAAGACTTATTGGTACGC

116/6881 FIGURE 110

 ${\tt ACCTACGTCCGCTGCCGTCGCCGCCGCCACC} \underline{ATG} {\tt CCAAGAGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAG}$ CAAAGGTGAAGGACGAACCACAGAGAAGATCCGCGAGGTTGTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCA AGCCTAAAAAGGCCCCTGCAAAGAAGGGAGAAGGTACCCAAAGGGAAAAAGGGAAAAGCTGATGCTGGCAAGG AGGGGAATAACCCTGCAGAAAATGGAGATGCCAAAACAGACCAGGCACAGAAAGCTGAAGGTGCTGGAGATGCCA AGTGAAGTGTGTGCATTTTTGATAACTGTGTACTTCTGGTGACTGTACAGTTTGAAATACTATTTTTTATCAAGT ATTGTTGTTTTTTGGGGGAAGGGGCATATGTCACTAATAGAATGTCTCCAAAGCTGGATTGATGTGGAGAAAACAC CTTTCCCTTCTAGTTTTGAGAGACTTCCTCTTGGCTCCCAGGAGGAGGAGTTCCCTGACTTTGACACACATGGCC ACCTTGGCACAAAAGCCTTGTGGTATAGAAAAACAAATTTGTTTTTTATGTCCTCTTCTCCCTTTCCATCTTTCAG CATAGACTTAACTCCCTTAAGCCCAGACATCTGTTGAGACCTGACCCCTAGTCATTGGTTACCAGTGTGTCAGGC AATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAAGAGCAGTGGTTCCATTTCTAGATTGTGGAT CTTCAGATAAATTCTGCCATTTTCACTTCCTGAAAGTCAGGGTCGGCTTGTGAAAAGTTGTTAAACAACA TGCTAAATGTGAAATGTCAACCCTCACTCTAAACTTTCCCTGTTCAGAGCATCAGATGAAGACTTCATTGGGTTT ${\tt TATAGTGGCTTTCTGATTTTTGGTAGTCCATTGAAGAAGGGAGTTTGAAGATTGTTATACTGTTAACGATTGT}$ $\tt CTGCCCATGTCCTGCCTGAAATACCATGATTGTTTATGGAAAGTATCTTTAATAAAGCTGGATACAGTTTGGC$

 ${\tt MPKRKAEGDAKGDKAKVKDEPQRRSARLSAKPAPPKPEPKPKKAPAKKGEKVPKGKKGKADAGKEGNNPAENGDAKTDQAQKAEGAGDAK}$

FIGURE 112A

GAAAGCGGAGATCACAGCGGGGCCAGGCCCTGGGGAGCCTCCACCGCCCCCTCATTCCCAGGCAAGGG CTTGGGGGGAATGAGCCGGGAGAGCCGGGTCCCGAGCCTACAGAGCCGGGAGCAGCTGAGCCGCCGCGCCCTCGG CGAGCGCGGTGGAAATGAAGGCAGCCGCCGGGCAGGAAAGCGAGGGCCCCGCCGTGGGGCCCGCCGCATCCGCTGG GCGCGGAGCCGGACCTGAAGAACTCGAACGGGAACGCGGGCCCTAGGCCCCCTGAACAATAACCTCACGGAGC CCCCAGCCTACGGCTTCGGGCAACCCTACGGCCGGAGCCCGTCTGCCGTCGCCGCCGCCGCCGCCGCCGTCTTCC ACCAACAACATGGCGGACAACAAAGCCCTGGCCTGGCAGCGCTGCAGAGCGGCGGCGGGGGGCCTGGAGCCCT ACGCGGGGCCCCAGCAGAACTCTCACGACCACGGCTTCCCCAACCACCAGTACAACTCCTACTACCCCAACCGCA GCGCCTACCCCCGCCCGGCCCTACGCGCTGAGCTCCCCGAGAGGTGGCACTCCGGGCTCCGGCGGCGG CGGCTGCCGGCTCCAAGCCGCCTCCTCCAGCGCCTCCGCCTCGTCGTCTTCGTCCTTCGCTCAGCAGC GCTTCGGGGCCATGGGGGGGGGGCCCCTCCGCGGCCGGGGGGGAACTCCCAGCCCACCGCCACCCCCACCC TCAACCAACTGCTCACGTCGCCCAGCTCGGCCCGGGGCTACCAGGGCTACCCCGGGGGGCGACTACAGTGGCGGGC CCCAGGACGGGGGCGCCAAGGGCCCGGCGGACATGGCCTCGCAGTGTTGGGGGGGCTGCGGCGGCAGCTG CGGCGGCGGCCCTCGGGAGGGGCCCAACAAAGGAGCCACCACGCGCCCATGAGCCCCGGGAGCAGCGGCGGCG GGGGGCAGCCGCTCGGCCCTCAGCCATCCAGTCCAATGGATCAGATGGGCAAGATGAGACCTCAGCCAT ATGGCGGGACTAACCCATACTCGCAGCAACAGGGACCTCCGTCAGGACCGCAGCAAGGACATGGGTACCCAGGGC AGCCATACGGGTCCCAGACCCCGCAGCGGTACCCGATGACCATGCGGGCCGGGCCCAGAGTGCCATGGGCGGCC TCTCTTATACACAGCAGATTCCTCCTTATGGACAACAAGGCCCCAGCGGGTATGGTCAACAGGGCCAGACTCCAT ATTACAACCAGCAAAGTCCTCACCCTCAGCAGCAGCAGCCACCCTACTCCCAGCAACCACCGTCCCAGACCCCTC ATGCCCAACCTTCGTATCAGCAGCAGCCACAGTCTCAACCACCACGGCTCCAGTCCTCTCAGCCTCCATACTCCC AGCAGCCATCCCAGCATCAGCAGTCCCCGGCTCCATACCCCTCCCAGCAGTCGACGACACCAGCACC CCTCGACGCTCTCCCAGCAGGCTGCGTATCCTCAGCCCCAGTCTCAGCAGTCCCAGCAAACTGCCTATTCCCAGC AGCGCTTCCCTCCACCGCAGGAGCTATCTCAAGATTCATTTGGGTCTCAGGCATCCTCAGCCCCCTCAATGACCT CAATAGATGACCTCCCCATGGGGACAGAAGGAGCTCTGAGTCCTGGAGTGAGCACATCAGGGATTTCCAGCAGCC CTTCCCCGTCCCCTGTTGGCTCTCCCGCCAGTGTTGCTCAGTCTCGCCTAGGACCACTCTCGCCTGCTGCAGTGC CAGGCAACCAGATGCCACCTCGGCCACCCAGTGGCCAGTCGGACAGCATCATGCATCCTTCCATGAACCAATCAA GCATTGCCCAAGATCGAGGTTATATGCAGAGGAACCCCCAGATGCCCCAGTACAGTTCCCCCCAGCCCGGCTCAG CCTTATCTCCGCGTCAGCCTTCCGGAGGACAGATACACACAGGCATGGGCTCCTACCAGCAGAACTCCATGGGGA GCTATGGTGCCCAGGGGGGTCAGTATGGCCCACAAGGTGGCTACCCCAGGCAGCCAAACTATAATGCCTTGCCCA ATGCCAACTACCCCAGTGCAGGCATGGCTGGAGGCATAAACCCCATGGGTGCCGGAGGTCAAATGCATGGACAGC CTGGCATCCCACCTTATGGCACACTCCCTCCAGGGAGGATGAGTCACGCCTCCATGGGCAACCGGCCTTATGGCC CTAACATGGCCAATATGCCACCTCAGGTTGGGTCAGGGATGTGTCCCCCACCAGGGGGCATGAACCGGAAAACCC AAGAAACTGCTGTCGCCATGCATGTTGCTGCCAACTCTATCCAAAACAGGCCGCCAGGCTACCCCAATATGAATC GACCCCATATTCCATGGGTGGAACCATGGCCAACAATTCTGCAGGGATGGCAGCCCAGCCCAGAGATGATGGGCC TTGGGGATGTAAAGTTAACTCCAGCCACCAAAATGAACAACAAGGCAGATGGGACACCCAAGACAGAATCCAAAT ${\tt CCAAGAAATCCAGTTCTTCTACTACAACCAATGAGAAGATCACCAAGTTGTATGAGCTGGGTGGTGAGCCTGAGA}$ GTAGGAAACCTCTGGACCTCTATCGCCTCTATGTGTCTGTGAAGGAGATTGGTGGATTGACTCAGGTCAACAAGA ACAAAAATGGCGGGAACTTGCAACCAACCTCAATGTGGGCACATCAAGCAGTGCTGCCAGCTCCTTGAAAAAGC

FIGURE 112B

AGTATATCCAGTGTCTCTATGCCTTTGAATGCAAGATTGAACGGGGAGAAGACCCTCCCCCAGACATCTTTGCAG AGACTCCCCAGTCAACCAGCAGTTCCATGGCAGAAGGAGGAGACTTAAAGCCACCAACTCCAGCATCCACCAC ACAGTCAGATCCCCCCATTGCCAGGCATGAGCAGGAGCAATTCAGTTGGGATCCAGGATGCCTTTAATGATGGAA GTGACTCCACATTCCAGAAGCGGAATTCCATGACTCCAAACCCTGGGTATCAGCCCAGTATGAATACCTCTGACA TGATGGGGCGCATGTCCTATGAGCCAAATAAGGATCCTTATGGCAGCATGAGGAAAGCTCCAGGGAGTGATCCCT ${\tt TCATGTCCTCAGGGCAGGGCCCCAACGGCGGGATGGGTGACCCCTACAGTCGTGCTGCCCCTGGGCTAGGAA}$ ATGTGGCGATGGGACCACGACAGCACTATCCCTATGGAGGTCCTTATGACAGAGTGAGGACGGAGCCTGGAATAG GGCCTGAGGGAAACATGAGCACTGGGGCCCCACAGCCGAATCTCATGCCTTCCAACCCAGACTCGGGGATGTATT CTCCTAGCCGCTACCCCCGCAGCAGCAGCAGCAGCAGCAGCACGACGTGATTCCTATGGCAATCAGTTCTCCA CCCAAGGCACCCCTTCTGGCAGCCCCTTCCCCAGCCAGCAGACTACAATGTATCAACAGCAACAGCAGAATTACA AGCGGCCAATGGATGGCACATATGGCCCTCCTGCCAAGCGGCACGAAGGGGAGATGTACAGCGTGCCATACAGCA CTGGGCAGGGGCAGCCTCAGCAGCAGCAGTTGCCCCCAGCCCAGCCCCAGCCTGCCAGCAGCAACAAGCTGCCC AGCCTTCCCCTCAGCAAGATGTATACAACCAGTATGGCAATGCCTATCCTGCCACTGCCACAGCTGCTACTGAGC GCACCATGTGGCAGGGGCGTAATGACATGACCTATAATTATGCCAACAGGCAGAGCACGGGCTCTGCCCCCAGG GGCCTTCCCATGGCACACGCCAGCCCCCATATGGTCCCTCTGCCCCTGTGCCCCCATGACAAGGCCCCCTCCAT CTAACTACCAGCCCCACCAAGCATGCAGAATCACATTCCTCAGGTATCCAGCCCTGCTCCCCTGCCCCGGCCAA TGGAGAACCGCACCTCTCCTAGCAAGTCTCCATTCCTGCACTCTGGGATGAAAATGCAGAAGGCAGGTCCCCCAG TACCTGCCTCGCACATAGCACCTGCCCCTGTGCAGCCCCCCATGATTCGGCGGGATATCACCTTCCCACCTGGCT CTGTTGAAGCCACACCCTGTGTTGAAGCAGAGGAGGCGGCTCACAATGAAAGACATTGGAACCCCGGAGGCAT GGCGGGTAATGATGTCCCTCAAGTCTGGTCTCCTGGCAGAGAGCACATGGGCATTAGATACCATCAACATCCTGC TGGATCCTGGGAGGTTCAGCAAGGTGTCTAGTCCAGCTCCCATGGAGGGTGGGGAAGAAGAAGAAGAACTTCTAG AGCCAGCTTCAGAGAATAGTGAGGAGAAGCTGATCAGTAAGTTTGACAAGCTTCCAGTAAAGATCGTACAGAAGA ATGATCCATTTGTGGTGGACTGCTCAGATAAGCTTGGGCGTGTGCAGGAGTTTGACAGTGGCCTGCTGCACTGGC GGATTGGTGGGGGGGACACCACTGAGCATATCCAGACCCACTTCGAGAGCAAGACAGAGCTGCCTTCCCGGC CTCACGCACCCTGCCCACCAGCCCCTCGGAAGCATGTGACAACAGCAGAGGGTACACCAGGGACAACAGACCAGG AGGGGCCCCCACTGATGGACCTCCAGAAAAACGGATCACAGCCACTATGGATGACATGTTGTCTACTCGGTCTA GCACCTTGACCGAGGATGGAGCTAAGAGTTCAGAGGCCATCAAGGAGAGCAGCAAGTTTCCATTTGGCATTAGCC CAGCACAGAGCCACCGGAACATCAAGATCCTAGAGGACGAACCCCACAGTAAGGATGAGACCCCACTGTGTACCC TTCTGGACTGGCAGGATTCTCTTGCCAAGCGCTGCGTCTGTGTGTCCAATACCATTCGAAGCCTGTCATTTGTGC CAGGCAATGACTTTGAGATGTCCAAACACCCAGGGCTGCTCTCATCCTGGGCAAGCTGATCCTGCTGCACCACA AGCACCCAGAACGGAAGCAGGCACCACTAACTTATGAAAAGGAGGAGGAACAGGACCAAGGGGTGAGCTGCAACA **AAGTGGAGTGGTGGGACTGCTTGGAGATGCTCCGGGAAAACACCTTGGTTACACTCGCCAACATCTCGGGGC** CTTCAGCTGAAGCCCAGGACCCCTTTTCCACCTGGGCCCCAATGCCGTCCTTTCCCCGCAGAGACTGGTCTTGG AAACCCTCAGCAAACTCAGCATCCAGGACAACAATGTGGACCTGATTCTGGCCACACCCCCCTTCAGCCGCCTGG AGAAGTTGTATAGCACTATGGTGCGCTTCCTCAGTGACCGAAAGAACCCGGTGTGCCGGGAGATGGCTGTGGTAC TGCTGGCCAACCTGGCTCAGGGGGACAGCCTGGCAGCTCGTGCCATTGCAGTACAGAAGGGCAGTATCGGCAACC TCCTGGGCTTCCTAGAGGACAGCCTTGCCGCCACACAGTTCCAGCAGAGCCAGGCCAGCCTCCTCCACATGCAGA ACCCACCCTTTGAGCCAACTAGTGTGGACATGATGCGGCGGGCTGCCCGCGCGCTGCTTGCCTTGGCCAAGGTGG ACGAGAACCACTCAGAGTTTACTCTGTACGAATCACGGCTGTTGGACATCTCGGTATCACCGTTGATGAACTCAT

FIGURE 112C

FIGURE 113

CAACAATGTGGACCTGATTCTGGCCACACCCCCTTCAGCCGCCTGGAGAAGTTGTATAGCACTATGGTGCGCTT CCTCAGTGACCGAAAGAACCCGGTGTGCCGGGAGATGGCTGTGGTACTGCTGGCCAACCTGGCTCAGGGGGACAG CCTGGCAGCTCGTGCCATTGCAGTGCAGAAGGGCAGTATCGGCAACCTCCTGGGCTTCCTAGAGGACAGCCTTGC CATGATGCGGCGGCTGCCCGCGCTGCTTGCCTTGGCCAAGGTGGACGAGAACCACTCAGAGTTTACTCTGTA CGAATCACGGCTGTTGGACATCTCGGTATCACCGTTGATGAACTCATTGGTTTCACAAGTCATTTGTGATGTACT GAAACTGACTGTTGCCCTTTATTTATGCAAAACCACCTCAGAATCCAGTTTACCCTGTGCTGTCCAGCTTCTCCC CTTGTCCTCACCTTACTCCCCTCAGGACCCTACCCCACCCTCTTTGAAAAGACAAAGCTCTGCCTACATAGAAGA AGCCAAGAAGTTCGCAGTTGTGAACAGACCCTGTTCACTGGAGAGGCCTGTGCAGTAGAGTGTAGACCCTTTCAT GTACTGTACACCTGATACTGTAAACATACTGTAATAATAATGTCTCACATGGAAACAGAAAACGCTGGGT AAGTATCATGTGTGAACCTACAACACCCTGACCTCTTTCTCTCCTCCTTGATTGTATGAATAACCCTGAGATCAC CACATACCCTTGGATCCCCACAGTTTGGTCCTCCCCAGCTACCCCTTTATAGTATGACGAGTTAACAAGTTGG TGACCTGCACAAAGCGAGACACAGCTATTTAATCTCTTGCCAGATATCGCCCCTCTTGGTGCGATGCTGTACAGG TTGTTTCTTTCTAATCGAGGTGTGAAAAAGTTCTAGGTTCAGTTGAAGTTCTGATGAAGAAACACAATTGAGAT TTTTTCAGTGATAAAATCTGCATATTTGTATTTCAACAATGTAGCTAAAACTTGATGTAAATTCCTCCTTTTTTT CCTTTTTTGGCTTAATGAATATCATTTATTCAGTATGAAATCTTTATACTATATGTTCCACGTGTTAAGAATAAA TGTACATTAAATCTTGGT

FIGURE 114

ATTGGTCCCAGGCAGCAGTTAGCCCGCCGCCCGCCTGTGTGTCCCCAGAGCCATGGAGAGCCAGTCTGATCCA GAAGGCCAAGCTGGCAGAGCAGGCCGAACGCTATGAGGACATGGCAGCCTTCATGAAAGGCGCCGTGGAGAAGGG CGAGGAGCTCTCCTGCGAAGAGCGAAACCTGCTCTCAGTAGCCTATAAGAACGTGGTGGGCGGCCAGAGGGCTGC GTACCGGGTCTTCTACCTGAAGATGAAGGGTGACTACTACCGCTACCTGGCCGAGGTGGCCACCGGTGACGACAA GAAGCGCATCATTGACTCAGCCCGGTCAGCCTACCAGGAGGCCATCGGACATCAGCAAGAAGGAGATGCCGCCCAC CAACCCCATCCGCCTGGGCCTGGACTTTTCCGTCTTCCACTACGAGATCGCCAACAGCCCCGAGGAGGC CATCTCTCTGGCCAAGACCACTTTCGACGAGGCCATGGCTGATCTGCACACCCTCAGCGAGGACTCCTACAAAGA CAGCACCCTCATCATGCAGCTGCTGCGAGACAACCTGACACTGTGGACGGCCGACAACGCCGGGGAAGAGGGGGG GCCGAGAGGACTAGTATGGGGTGGGAGGCCCCACCCTTCTCCCCTAGGCGCTGTTCTTGCTCCAAAGGGCTCCGT GGAGAGGGACTGGCAGAGCTGAGGCCACCTGGGGCTGGGGATCCCACTCTTCTTGCAGCTGTTGAGCGCACCTAA CCACTGGTCATGCCCCCACCCCTGCTCTCCGCACCCGCTTCCTCCCGACCCCAGGACCAGGCTACTTCTCCCCTC CTCTTGCCTCCCTCCTGCCCCTGCTGCCTCTGATCGTAGGAATTGAGGAGTGTCCCGCCTTGTGGCTGAGAACTG AGACCGAGATTGAGGGAAAGCATGTCTGCTGGGTGTGACCATGTTTCCTCTCAATAAAGTTCCCCTGTGACACTC

 $\label{thm:constraint} \begin{minipage} MERASLIQKAKLAEQAERYEDMAAFMKGAVEKGEELSCEERNLLSVAYKNVVGGQRAAWRVLSSIEQKSNEEGSE \\ EKGPEVREYREKVETELQGVCDTVLGLLDSHLIKEAGDAESRVFYLKMKGDYYRYLAEVATGDDKKRIIDSARSA \\ YQEAMDISKKEMPPTNPIRLGLALNFSVFHYEIANSPEEAISLAKTTFDEAMADLHTLSEDSYKDSTLIMQLLRD \\ NLTLWTADNAGEEGGEAPQEPQS \end{minipage}$

CCGGAAGTCGAGTTAGTCTAGTTATCGGCCTGTTATCTCCTTTTGCGCGACACGGTCTCAGCTGTTCCGCCT ${\tt ACCTGCCCGTTTTCCCTGTGAGTTGACCTGCTCCGGGCCGGGGCCGCCA} \underline{{\tt ATG}} {\tt GCAGGGGCCGCTCCGACCACG}$ CGCGCGCTGGGCCGCGTGGCGGTGAACCTGGACCCGGCCAACGAGGGGCTGCCGTACGAGTGTGCCGTG GACGTGGGCGAGCTGGGGGGCTGGGCGACGTGATGGACGCGCTGCGCCTGGGGCCCAACGGCGGCCTGCTCTAC TGCATGGAGTACCTGGAAGCCAACCTGGACTGGCTGCGTGCCAAGCTCGACCCCCTCCGCGGCCACTACTTCCTC TTCGACTGCCCAGGCCAGGTGGAGCTCTGCACGCATCACGGCGCCTTGCGCAGCATCTTCTCCCAAATGGCGCAG TGGGACCTCAGGCTGACTGCCGTCCACCTCGTGGATTCTCACTACTGCACAGACCCTGCCAAGTTCATTTCAGTA CTGTGTACCTCCCTGGCCACCATGCTGCACGTGGAACTGCCCCACATCAACCTCCTTTCCAAGATGGACCTCATT GAGCATTATGGGAAGCTGGCCTTCAACCTGGACTACTACACAGAGGTTCTGGACCTCTCCTACCTGCTTGACCAC CTGGCTTCTGACCCTTTCTTCCGCCACTACCGCCAGCTCAATGAGAAGCTAGTGCAGCTCATCGAAGACTATAGC CTTGTCTCCTTTATCCCTCTCAACATCCAGGACAAGGAGAGCATCCAGCGAGTCCTGCAGGCTGTGGATAAAGCC AATGGATACTGTTTCAGAGCCCAAGAGCAGCGAAGCTTGGAAGCCATGATGTCTGCCGCAATGGGAGCCGACTTC CAGCTGTAGCAACAAGGTGGACCCTGGAGAGCAGGATGCATAATCCAGCACTGGGGAAAGTGGAGGCTCCTGATG CAGGCTGCAGACCCAAGAGCAAGTCCTCCCAGCCAGAGCTGGCGGGCTGGCAAGGGGGATATTCAGCTCTGCAAAG GACTTCTGGCCAAAAAGCCAGACATGGTGCCAAGCAGAACACCCCCCATACTGTCAGTGGTGTCCGTGAGCTCTG GGCCCTGCCACCAGAAAGTCGAGCACTGGTCCTAGTCAGGCTGTGATGAAATGTGCTACAATACAAGAGTTTATT TTCT

125/6881 FIGURE 117

 $\label{thm:constrated} $$ MAGAAPTTAFGQAVTGPPGSGKTTYCLGMSEFLRALGRRVAVVNLDPANEGLPYECAVDVGELVGLGDVMDALRL$$ GPNGGLLYCMEYLEANLDWLRAKLDPLRGHYFLFDCPGQVELCTHHGALRSIFSQMAQWDLRLTAVHLVDSHYCT DPAKFISVLCTSLATMLHVELPHINLLSKMDLIEHYGKLAFNLDYYTEVLDLSYLLDHLASDPFFRHYRQLNEKL$$ VQLIEDYSLVSFIPLNIQDKESIQRVLQAVDKANGYCFRAQEQRSLEAMMSAAMGADFHFSSTLGIQEKYLAPSN QSVEQEAMQL$

TAGAGTCGTTGGGCCCGGCGCGCCGCAGGAGCGTAGAGAGCGCGGGACTAGAGTGCAGAGCTCCGGGACGTGG GGAGAAGAAGGGATGGCAGAAGAGCTTATCACACAGACTTTCAGCCACCACAATCAGCTGGCACAGAAGACCCGG ${\tt AAGTCAGAGACCTCAGGGCCCCAGATCAAGGAGCTAACTGATGAAGAGGCAGAGAGGCTGCAGCTAGAGATTGAC}$ CAGAAAAAGGATGCAGAGAATCATGAGGCCCAGCTCAAGAACGGCAGCCTTGACTCCCCAGGGAAGCAGGATACT GAGGAAGATGAGGAGGAAGATGAGAAGGACAAAGGAAAACTGAAGCCCAACCTAGGCAACGGGGCAGACCTGCCC AATTACCGCTGGACCCAGACCCTGTCGGAGCTGGACCTGGCGGTCCCTTTCTGTGTGAACTTCCGGCTGAAAGGG GAGCTCTACAATGAAGTGAAGGTGGAGGAGGAGCTCGTGGCTCATTGAGGACGGCAAGGTGGTGACTGTGCATCTG GAGAAGATCAATAAGATGGAGTGGTGGAGCCGCTTGGTGTCCAGTGACCCTGAGATCAACACCAAGAAGATTAAC CCTGAGAATTCCAAGCTGTCAGACCTGGACAGTGAGACTCGCAGCATGGTGGAAAAGATGATGTATGACCAGCGA CAGAAGTCCATGGGGCTGCCAACTTCAGACGAACAGAAGAACAGGAGATTCTGAAGAAGTTCATGGATCAACAT $\texttt{CCGGAGATGGATTTTCCAAGGCTAAATTCAAC} \underline{\texttt{TAG}} \\ \texttt{CCCCTGTTTTTCCTCCCTGAACTCTTGGGGCTGAGCTG} \\$ CCAGGCACACAGGTCCCGGGGCATCAGGAGAAAGGCTGGGTCTTGGGACCTTGTCCTCCCCAGTTGGCCTACTGT

127/6881 FIGURE 119

 $\label{thm:constraint} $$ \mbox{MGGEQEERFDGMLLAMAQQHEGGVQELVNTFFSFLRRKTDFFIGGEEGMAEKLITQTFSHHNQLAQKTRREKRA RQEAERREKAERAARLAKEAKSETSGPQIKELTDEEAERLQLEIDQKKDAENHEAQLKNGSLDSPGKQDTEEDEE EDEKDKGKLKPNLGNGADLPNYRWTQTLSELDLAVPFCVNFRLKGKDMVVDIQRRHLRVGLKGQPAIIDGELYNE VKVEESSWLIEDGKVVTVHLEKINKMEWWSRLVSSDPEINTKKINPENSKLSDLDSETRSMVEKMMYDQRQKSMG LPTSDEQKKQEILKKFMDQHPEMDFSKAKFN$

FIGURE 120

 ${\tt CCTGGTATGATTCCATCCTGAGCGGCTGTTCTCTTGAGCAGCGTTCATTTATCTCCGTCTGCCTTCTGTCCCACC}$ ${\tt TAAGTGTGCCGCCACCCAATAGAAGATTCG} \underline{{\tt ATC}} {\tt GACATGGACATGAGCCCCCTGAGGCCCCCAGAACTATCTTT}$ TCGGTTGTGAACTAAAGGCTGACAAAGATGATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAGTTATCTT TAAGAACGGTCAGTTTAGGGGCTGGTACAAAGGATGAATTGCACATTGTTGAAGCAGAGGCAATGAATTACAAAG GCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGCACAGCCAACAGTTTCCCTTGGGGGCTTTGAAA TAACACCACCAGTGGTCTTAAGATTTAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCACTTAGTAGCTG ATGATGATGATGATGATGATGAGGAAGCTGAAGAAAAGTGCCAGTGAAGAAAGGACAAGAATCCTTCA GTATAGAAAAAGGGGGTTCTCTCCCAAAGTGGAAGCCGAGTTCATCAATTTTGTGAAGAATTGCTTCTGGATGA $\tt CTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAGTCTCCT\underline{TAA}\underline{G}AAAATAGTTTCAACAATTTGTTAA$ AAATTTTCCATCATATTCCATTCTGTAACAGTTGATATCTGGCTGTCCTTTTTATAATGCAGAGTGAGAACTTT CCCTACCGTGTTTGATAAATGTTGTCCAGGTTCCATTGCCAAGAATGTGTTGTCCAAAATGCCTGTTTAGTTTTT AAAAA

MDMDMSPLRPQNYLFGCELKADKDDHFKVDNDENEHQLSLRTVSLGAGTKDELHIVEAEAMNYKGSPIKVTLATL KMSAQPTVSLGGFEITPPVVLRFKCGSGPVHISGQHLVAVEEDAESEDEEEEDVKLLSISGKRSAPGGGSKVPQK KVKLAVDEDDDDDDDDDDDDDDDDDEEAEEKVPVKKGQESFKTQEKTPKTPKGSSSVEDIKAKMQASIEKGGSLPKV EAEFINFVKNCFWMTDQEAIQDLWQWRKSP

FIGURE 122

AGCTGCTGGCTGCCTGTTGAGTCAGCCTTCTTCCCTCACGGCTCTTCTCCCCGGTCCCTGAAACTCGGCTG CCAGGGGAGCTGGAGCCACCTGCGAAGGTGTCCTCCCATACTGGACCCCTACAGGAAGCTCCGTGTGCCCAGCTG GGGCACAGCCCAGCTGATGCCCCAGAGGGGCCACCCATCGCAAGAGGGGCTTTGGGCTCTGCCCTCCCCCA TGGCGCATGGGCCAAAGCCTGAGACTGAAGGACTGTTGGACCTCAGCTTCCTGACAGAGGAGGAGCAGGAGGCCCA TGGCAGACCCTGGGCAGCTGAAGATCCTGACAGGGGACTGGTTCCAGGAAGCACGCTCCCAGCGGCACCACAATG CCCACTTCGGCTCTGACCTTGTCCGAGCGTCTATGCGCAGGAAGAAGAGCACCAGGGGAGACCAGGCTCCAGGCC ACGACAGGGAGGCTGAGGCTGCTGAAAGAGAAGGAAGGGGCCCAGGCCCAGGCTCACCATTGATGAGGCCC CTCAGGAGAGGCTCAGGGAGACTGAGGCTTCAGATCCTGAGGAGGCGTCCCAGGCCCAGGAAGATCCTGGCCAAG GAGACCAACAGGTCTGTGCCGAGGAGGCTGACCCGGAGCTGGAGCCCGCGTCGGGGGGAGAGCAGGAGCCGCGGC CCCAGCAAGCCCAGACCAAGGCCGCGTCCCAGATCCTGGAGAATGGGGAGGGGCCCGGGGGCCCGACCCCTCTC TCGACCGCATGCTCAGCAGCAGCTCCTCGGTGTCCAGCCTTAACTCCTCCACGCTGAGCGGCAGCCAGATGAGCC AGCTGCGCGTGCACGTGATCCAGTGCCAGGGCCTGGCCGCCCGGCGCGCCGCTCGGACCCCTACGTCAAAA GCTACCTCCCGGATAAGCAGAGCAAGCGCAAGACGGCGGTGAAGAAACGGAATCTGAATCCGGTTTTCAACG GCCTGGGTCGCAACATCTTTCTGGGCGAAGTTGAAGTGCCCCTGGACACGTGGGACTGGGGCTCTGAGCCCACCT GGCTCCCCTGCAGCCCGGGTCCCACCCTCTCCCGACGACCTTCCGAGCCGCGGGTTACTCGCCCTGTCCCTCA AGTACGTCCCCGCCGGCTCCGAGGGCCCAGGACTGCCCCCGAGCGGGGAGCTGCACTTCTGGGTGAAGGAGGCTC GGGACCTCCTGCCGCTGCGGCAGGATCCCTGGACACTTACGTACAATGCTTCGTGCTGCCTGATGACAGCCAGG CCAGCCGCCAGCGTACAAGGGTTGTGCGACGCAGCCTCAGCCCTGTGTTCAATCACACCATGGTGTACGATGGCT TTGGGCCTGCTGACCTGCGCCAGCTTTGTGCCGAGCTCTCCCTCTGGGACCATGGGGCCCTGGCCAACCGCCAGC AGGAGAAGCAGCTGTGGCAAGCCCTCCTGGAGCAGCCGTGCGAATGGGTGGATGGCCTTCTACCCCTCAGAACCA TCAATAAAGTCTATTCTAAGAGC

131/6881 FIGURE 123

MPQRGHPSQEGLWALPSLPMAHGPKPETEGLLDLSFLTEEEQEAIAGVLQRDARLRQLEEGRVSKLRASVADPGQ
LKILTGDWFQEARSQRHHNAHFGSDLVRASMRRKKSTRGDQAPGHDREAEAAVKEKEEGPEPRLTIDEAPQERLR
ETEASDPEEASQAQEDPGQGDQQVCAEEADPELEPASGGEQEPRPQQAQTKAASQILENGEEAPGPDPSLDRMLS
SSSSVSSLNSSTLSGSQMSLSGDAEAVQVRGSVHFALHYEPGAAELRVHVIQCQGLAAARRRRSDPYVKSYLLPD
KQSKRKTAVKKRNLNPVFNETLRYSVPQAELQGRVLSLSVWHRESLGRNIFLGEVEVPLDTWDWGSEPTWLPLQP
RVPPSPDDLPSRGLLALSLKYVPAGSEGAGLPPSGELHFWVKEARDLLPLRAGSLDTYVQCFVLPDDSQASRQRT
RVVRRSLSPVFNHTMVYDGFGPADLRQACAELSLWDHGALANRQLGGTRLSLGTGSSYGLQVPWMDSTPEEKQLW
QALLEQPCEWVDGLLPLRTNLAPRT

FIGURE 124

ATGCCGTTAGTAACGAGGAACATCGAGCCAAGGCACCTGTGCCGTCAGACGTTGCCTAGCGTTAGAAGCGAGCTG GAATGCGTGACCAACATCACCCTGGCAAATGTCATCCGACAGCTGGGCAGCCTGAGTAAATATGCAGAGGACATT CAGGTTAAAGTCACTCAGCTGGATCCCAAGGAAGAAGAAGTGTCACTGCAAGGAATCAACACCCGAAAAGCCTTC AGAAGTTCCACCATTCAAGACCAGAAGCTTTTTGACAGAAACTCTCTCCCAGTGCCTGTCTTAGAAACATACAAT ACCTGTGATACTCCTCCCCCTCTCAACAATCTTACCCCTTACAGGGACGATGGAAAAGAGGCACTCAAATTCTAC ACAGACCCTTCATACTTCTTTGATCTTTGGAAGGAGAAGATGCTGCAGGACACCAAGGATATCATGAAAGAGAAG AGAAAGCACAGGAAAGAAAAGAAAGATAATCCAAATCGAGGGAATGTAAAACCCACGTAAAATCAAGACACGTAAG GAAGAGTGGGAGAAATGAAGATGGGGCAAGAATTTGTGGAGTCCAAAGAAAAGCTGGGGACTTCTGGGTATCCA CCCACTTTGGTGTACCAGAATGGCAGCATTGGCTGTTGAAAACGTGGATGCAAGTAGCTATCCGCCACCACCA CAGTCAGACTCTGCTTCTCACCTTCTCCTTCCTCCGAGGACAACTTGCCTCCTCCACCAGCAGAATTCAGT TACCCAGTGGACAACCAAAGAGGATCTGGTTTGGCTGGACCCAAAAGATCCAGTGTGGTCAGCCCAAGCCATCCA CCACCAGCTCCTCTAGGCTCTCCACCAGGCCCTAAACCCGGGTTTGCTCCACCACCTGCCCCTCCGCCACCT TCACCCCCATCTTTCCCACCTCACCTGATTTTGCTGCCCCTCCACCTCCTCCACCACCACCAGCAGCTGACTAC GGGCCCCTCCTCCCCCTTTCACTGGTGCAGATGGCCAGCCTGCTATACCACCACCGCTTTCTGATACCACCAAG CCCAAGTCCTCCTTGCCTGCCGTGAGCGATGCCCGTAGCGACCTGCTTTCAGCCATCCGTCAAGGTTTTCAGCTG $\tt CGCAGGGTTGAGGAGCAGCGGGAACAAGAGAGAGCGGGATGTTGTGGGCAATGACGTGGCCACCATCTTGTCTCGT$ ${\tt CGCATTGCTGTTGAGTACAGTGACTCAGAAGATGACTCCTCTGAATTTGATGAGGACGACTGGTCCGAT}$

133/6881 FIGURE 125

MPLVTRNIEPRHLCRQTLPSVRSELECVTNITLANVIRQLGSLSKYAEDIFGELFTQANTFASRVSSLAERVDRL
QVKVTQLDPKEEEVSLQGINTRKAFRSSTIQDQKLFDRNSLPVPVLETYNTCDTPPPLNNLTPYRDDGKEALKFY
TDPSYFFDLWKEKMLQDTKDIMKEKRKHRKEKKDNPNRGNVNPRKIKTRKEEWEKMKMGQEFVESKEKLGTSGYP
PTLVYQNGSIGCVENVDASSYPPPPQSDSASSPSPSFSEDNLPPPPAEFSYPVDNQRGSGLAGPKRSSVVSPSHP
PPAPPLGSPPGPKPGFAPPPAPPPPPPMIGIPPPPPPVGFGSPGTPPPPSPPSFPPHPDFAAPPPPPPPPAADY
PTLPPPPLSQPTGGAPPPPPPPPPPPFTGADGQPAIPPPLSDTTKPKSSLPAVSDARSDLLSAIRQGFQL
RRVEEQREQEKRDVVGNDVATILSRRIAVEYSDSEDDSSEFDEDDWSD

134/6881 FIGURE 126

AGAATTGGGCTCCAGGTCTCTGACCCCTCCCAAGGATCATGCCGCAGCCCCACTGACCCAGGAGTAGGGGCCTAA GGGCAGGGAACCTGGAATGGGCTGTGTTCTGCAAGAAATTGGAGCCGGTGGCCACGGCCAAGGAGGATGCTGG CCTGGAAGGGGACTTCAGAAGCTACGGGGCAGCAGCACTATGGGCCTGACCCCACTAAGGCCCGGCCTGCATC CTCATTTGCCCACATCCCCAACTACAGCAACTTCTCCTCTCAGGCCATCAACCCTGGCTTCCTTGATAGTGGCAC CATCAGGGGTGTCAGGGATTGGGGTGACCCTGTTCATTGCCCTGTATGACTATGAGGCTCGAACTGAGGATGA CCTCACCTTCACCAAGGGCGAGAAGTTCCACATCCTGAACAATACTGAAGGTGACTGGTGGGAGGCTCGGTCTCT CAGCTCCGGAAAAACTGGCTGCATTCCCAGCAACTACGTGGCCCCTGTTGACTCAATCCAAGCTGAAGAGTGGTA CTTTGGAAAGATTGGGAGAAAGGATGCAGAGAGGCAGCTGCTTTCACCAGGCAACCCCCAGGGGGCCTTTCTCAT TCGGGAAAGCGAGACCACCAAAGGTGCCTACTCCCTGTCCATCCGGGACTGGGATCAGACCAGAGGCGATCATGT GAAGCATTACAAGATCCGCAAACTGGACATGGGCGGCTACTACATCACCACACGGGTTCAGTTCAACTCGGTGCA GGAGCTGGTGCAGCACTACATGGAGGTGAATGACGGGCTGTGCAACCTGCTCATCGCGCCCTGCACCATCATGAA GCCGCAGACGCTGGGCCTAGGACGCCTGGGAGATCAGCCGCAGCTCCATCACGCTGGAGCGCCGGCTGGG CACCGGCTGCTTCGGGGATGTGTGGCTGGGCACGTGGAACGCCACTAAGGTGGCGGTGAAGACGCTGAAGCC GGGCACCATGTCCCCGAAGGCCTTCCTGGAGGAGGCGCAGGTCATGAAGCTGCTGCGGCACGACAAGCTGGTGCA GCTGTACGCCGTGGTGTCGGAGGAGCCCATCTACATCGTGACCGAGTTCATGTGTCACGGCAGCTTGCTGGATTT TCTCAAGAACCCAGAGGGCCAGGATTTGAGGCTGCCCCAATTGGTGGACATGGCAGCCCAGGTAGCTGAGGGCAT GGCCTACATGGAACGCATGAACTACATTCACCGCGACCTGAGGGCAGCCAACATCCTGGTTGGGGAGCGGCTGGC GTGCAAGATCGCAGACTTTGGCTTGGCGCGTCTCATCAAGGACGATGAGTACAACCCCTGCCAAGGTTCCAAGTT CCCCATCAAGTGGACAGCCCCAGAAGCTGCCCTCTTTGGCAGATTCACCATCAAGTCAGACGTGTGGTCCTTTGG GATCCTGCTCACTGAGCTCATCACCAAGGGCCGAATCCCCTACCCAGGCATGAATAAACGGGAAGTGTTGGAACA GGTGGAGCAGGGCTACCACATGCCGTGCCCTCCAGGCTGCCCAGCATCCCTGTACGAGGCCATGGAACAGACCTG ACCACAGTACCAGCCCGGGGATCAGACATAGCCTGTCCGGGCATCAACCCTCTCTGGCGGTGGCCACCAGTCCTT CGTGGCTGCTCTGACACCACCTAGGGCAACCTACTTGTTTTACAGATGGGGCAAAAGGAGGCCCAGAGCTGATCT $\verb|CTCATCCGCTCTGGCCCCAAGCACTATTTCTTCCTTTTCCACTTAGGCCCCTACATGCCTGTAGCCTTTCTCACT|\\$ TCACTGCTTTCCTACTCTCTTTTATCTCACTCTAGTCCAGGTGCCAAGAATTTCCCTTCTACCCTCTATTCTCT TGTGTCTGTAAGTTACAAAGTCAGGAAAAGTCTTGGCTGGACCCCTTTCCTGCTGGGTGGATGCAGTGGTCCAGG ACTGGGGTCTGGGCCCAGGTTTGAGGGAGAAGGTTGCAGAGCACTTCCCACCTCTGAATAGTGTGTATGTGTT GGTTTATTGATTCTGTAAATAAGTAAAATGACAATATGAATCCTC

TGGGCAGAGGAGACAGGAACAAGCGTAGCATCCGTGAGCACCGGATTGGCTGAAGCGAGCACCCCGGGAGCTGACT GGCTCCGCCATTCGCGGGAAGGCGTTTGTGGTGCCAGAGAAAAGTAGCCAGAGCGGCGCAGTGGCGGCCGCGTTC TGTGGTTTTCCGCTATTCCCCCAGACCCGCACCTTCTCGGCCTCTTTGCGGAGAATCGTGACCAAGATGTGGAAC AGTGGATTCGAAAGCTATGGCAGCTCCTCATACGGGGGAGCCGGCGGCTACACGCAGTCCCCGGGGGGCTTTGGA TCGCCCGCACCTTCTCAAGCCGAAAAGAAATCAAGAGCCCGAGCCCAGCACATTGTGCCCTGTACTATATCTCAG CTGCTTTCTGCCACTTTGGTTGATGAAGTGTTCAGAATTGGGAATGTTGAGATTTCACAGGTCACTATTGTGGGG ATCATCAGACATGCAGAGAAGGCTCCAACCAACATTGTTTACAAAATAGATGACATGACAGCTGCACCCATGGAC GTTCGCCAGTGGGTTGACACAGATGACACCAGCAGTGAAAACACTGTGGTTCCTCCAGAAACATATGTGAAAGTG GCAGGCCACCTGAGATCTTTTCAGAACAAAAAGAGCCTGGTAGCCTTTAAGATCATGCCCCTGGAGGATATGAAT GGGAGAGCACCTATCAGCAATCCAGGAATGAGTGAAGCAGGGAACTTTGGTGGGAATAGCTTCATGCCAGCAAAT GGCCTCACTGTGGCCCAAAACCAGGTGTTGAATTTGATTAAGGCTTGTCCAAGACCTGAAGGGTTGAACTTTCAG CACATCTATTCTACTGTGGATGATGACCATTTTAAATCCACAGATGCAGAA<u>TAA</u>CTGGATCTAACTGGGTACCTG AGATATTTTACAGCTGGACCTAGTTTCACAATCTGTTGTCTCCAGCTCTGCATATGTCTGGCCAGGGGGCTTCTA GGAAGTAGGTTTCATCTATCAAATGTCTCCTCTGACTTCCTTTTGAAACTTACTGCTCTTCTGTTTTATTTTGTT TTGTTTGAAGCTCAGAGGGAGATGGGCAATTGACAGGGATGCAATCCAGGGTGGGATTTCTTGAGGAAGTTACAA ATAAGCTTGTTACAACATCAAGATAGATGGAATTGGAAGGATGCTACCAGGAGAGTACTTACATAGTGCTCAGGA GTTTCTCTTAAAATGTTTACTGCTGAAAGATGAGCAGGACCAGGGCGTTATAGGCAGAGCCCTAGCCGAGAA ACCTGCTGGCCTCTTCATTTCATTTCCCACTTTGGTTGTGGCATTACTTTCAGAATTGCACTTTCCTGCT TGTCATGACTTTTTGACACACTTGCCATGACGTGTGTTTCTGTGAACATGAAGTTCTGCGGTAGTGCCTCCAGGG TGTAAAAAAAAAAAAAAAAAA

136/6881 FIGURE 128

MWNSGFESYGSSSYGGAGGYTQSPGGFGSPAPSQAEKKSRARAQHIVPCTISQLLSATLVDEVFRIGNVEISQVT IVGIIRHAEKAPTNIVYKIDDMTAAPMDVRQWVDTDDTSSENTVVPPETYVKVAGHLRSFQNKKSLVAFKIMPLE DMNEFTTHILEVINAHMVLSKANSQPSAGRAPISNPGMSEAGNFGGNSFMPANGLTVAQNQVLNLIKACPRPEGL NFQDLKNQLKHMSVSSIKQAVDFLSNEGHIYSTVDDDHFKSTDAE

FIGURE 130

TCCAGCACCAAAGCGGCCGTTCTCGGATTCCGGAGCGTTCTGGAGCCCCGAGAGACGCCCCGGGGTTCTAGAAGC TCCCCGGCGCCCCAGTCCCGGCTTCATTCGGGCGTCCCTCCGAAACCCACTCGGGTGCACGGGTCGTCGGCGA ${\tt GCCGCGACCGGGTCCTGGCGCGCACC}{{\tt ATG}{\tt ATCGTGGCGGACTCCGAGTGCCGCGCAGAGCTCAAGGACTACCTGC}$ GGTTCGCCCCGGGCGCGTCGGCGACTCGGGCCCCGGAGAGGAGCAGAGGGAGAGCCGGGCTCGGCGAGGCCCTC GAGGGCCCAGCGCCTTCATCCCCGTGGAGGAGGTCCTTCGGGAGGGGGCTGAGAGCCTCGAGCACCACCTGGGGC TGGAGGCACTGATGTCCTCTGGGCGAGTAGACAACCTGGCAGTGGTGATGGGCCTGCACCCTGACTACTTTACCA GCTTCTGGCGCCTGCACTACCTGCTGCACACGGATGGTCCCTTGGCCAGCTCCTGGCGCCACTACATTGCCA TCATGGCTGCCGCCCATCAGTGTTCTTACCTGGTAGGCTCCCACATGGCCGAGTTTCTGCAGACTGGTGGTG ACCCTGAGTGGCTGCTGGGCCTCCACCGGGCCCCCGAGAAGCTGCGCAAACTCAGCGAGATCAACAAGTTGCTGG CGCATCGGCCATGGCTCATCACCAAGGAACACATCCAGGCCTTGCTGAAGACCGGCGAGCACACTTGGTCCCTGG CCGAGCTCATTCAGGCTCTGGTCCTGCTCACCCACTGCCACTCGCTCTCCTCCTTCGTGTTTGGCTGTGGCATCC TCCCTGAGGGGGATGCAGATGGCAGCCCTGCCCCCAGGCACCTACACCCCCTAGTGAACAGAGCAGCCCCCCAA GCAGGGACCCGTTGAACAACTCTGGGGGCTTTGAGTCTGCCCGCGACGTGGAGGCGCTGATGGAGCGCATGCAGC AGCTGCAGGAGAGCCTGCTGCGGGATGAGGGGACGTCCCAGGAGGAGATGGAGAGCCGCTTTGAGCTGGAGAAGT CAGAGAGCCTGCTGGTGACCCCCTCAGCTGACATCCTGGAGCCCTCTCCACACCCAGACATGCTGTGCTTTGTGG ATACCTGGGAAGACCATGGCTACTCGCTGATCCAGCGGCTTTACCCTGAGGGTGGGCAGCTGCTGGATGAGAAGT TCCAGGCAGCCTATAGCCTCACCTACAATACCATCGCCATGCACAGTGGTGTGGACACCTCCGTGCTCCGCAGGG ${\tt CCATCTGGAACTATATCCACTGCGTCTTTGGCATCAGATATGATGACTATGATTATGGGGAGGTGAACCAGCTCC}$ TGGAGCGGAACCTCAAGGTCTATATCAAGACAGTGGCCTGCTACCCAGAGAAGACCACCCGAAGAATGTACAACC TCTTCTGGAGGCACTTCCGCCACTCAGAGAAGGTCCACGTGAACTTGCTGCTCCTGGAGGCGCGCATGCAAGCCG CCCCACAAGGACTTCTCTGTCTGGAGACAGCCCCAGACCCTTTTGTGTCCCATGCCCACCCTCCCCACGCTGCAG GACTCTGGGATCTCAGCCCTGCTCCTGGGAGCTGGAAGAGCACTTGGAGATCCTAAGGGACCACACCCTTCCTCC TTCCCCTGCCCACAGAGGCAGAGGGCACAGGAAAGAAGCCGGGCCAAGCTCGGAATTAATGTGCCACAAGTGTTG TGGCCTTCCTGAACTGGGAAGTCCCTGGCTGGCCCCCGGGGGAGAGGGGCAAATGCCTCCGGGACTGACACTCCA GGCAGCTTTGCCTTCTCCCCTGTCATTTCCAGATTTCATTACCTCCTACTTGCCATTCACCCATCAATGTGAA AGTCAGGGTCACAGCTGGTCTGTGTCCCAGTTCCCTAAAAGCCTGTTCTGTTGGGCAGCCTGAGGCTGTTGCCC GAATCCTAGTTCAGTTTTTGACTTCCTTTGCCCTTTTTCCCTTTTCTCCATGCTTAATGGTGTGAGGCGTCAGG AGAGAGGCCAAGTACATAAAAAAAAAAAAAAGCAGATTATCTCTAGAGAGTTTGAGCCTTTGCTGGTCACATTGC CTTCTGAAGAGGAGGAGTATTAGATTATAAATCCTCTTTATTTTGGTCCTTTATGCTTGAGGTTCCAACCTGGA GCCACAGTGTGTGAGAGGAGGAGGAGAGATTCTGTTCTCCCAGAGCTGCACCTGCCTCGCAGAGGCCAGC ACCCCACTCTCCTGCCTCCAGTGGCCCTGCCGCAGATGTCTCCCAAAAAGTTGAGCCTTTCTAGATGGCTTAGGT TCTGAAGCTGCCCCTGGGATTCTCAGGCCAACCTGCCAACAGCAAGCGGATTTTCTTGCAAGATCAGGGACCCCA TTTCTGCAGCCAGTGTCTCCTGGGTGCCTTCTGAGGACTCCCACCCCCATCCCAGTATCTCATCTGTCCCCTCTC $\tt CTGGGGCTTAAGTGGGTTGCTTCCAGGCAGAAGCAGCCAAGGACCGATTCCAGGCACTTTCTGTAGCAAATGACT$ GTGAATTACGACTTCTTGCCCTTCTTCTAGCAGTCTGTGCCTCCTCTGACCAGTTTGGAGGGCACTGAAGA AAGGCAAGGGCCGTGCTGCTGGCGGGGGGGAGAGGAGGAGCCTGGCCAGTGTGCCACATTAAATACCCGTGCA CCAGTGTTCAAGTGCAGAAATCTTTGGCTTTGCTACCAGTTCCATATGATGAGAAATAAACGTTCGCTGAGGTTT TGTTTCATAAAAAAAAAAAAAAAAAAAAA

140/6881 FIGURE 132

MIVADSECRAELKDYLRFAPGGVGDSGPGEEQRESRARRGPRGPSAFIPVEEVLREGAESLEQHLGLEALMSSGR VDNLAVVMGLHPDYFTSFWRLHYLLLHTDGPLASSWRHYIAIMAAARHQCSYLVGSHMAEFLQTGGDPEWLLGLH RAPEKLRKLSEINKLLAHRPWLITKEHIQALLKTGEHTWSLAELIQALVLLTHCHSLSSFVFGCGILPEGDADGS PAPQAPTPPSEQSSPPSRDPLNNSGGFESARDVEALMERMQQLQESLLRDEGTSQEEMESRFELEKSESLLVTPS ADILEPSPHPDMLCFVEDPTFGYEDFTRRGAQAPPTFRAQDYTWEDHGYSLIQRLYPEGGQLLDEKFQAAYSLTY NTIAMHSGVDTSVLRRAIWNYIHCVFGIRYDDYDYGEVNQLLERNLKVYIKTVACYPEKTTRRMYNLFWRHFRHS EKVHVNLLLLEARMQAALLYALRAITRYMT

FIGURE 133

GAGACGTCGGCTTCCGACCGGAAGTGAGAAGAGGAGGAGGTTGGCTGGTTGCACCGATCTGGGGGCTTCCCGGGC TCGGGTAACCGGAGTGCTGGTATCTAATCGTCGCTCAAAAGCTCCTAGGTATATCCCGTGCCTTACCTGACTGGG GGCTCTGAGTCCAGTTGTGTTGTCTTCAACTTAGACACCATGGAGGCACCTCCAGTCACCATGATGCCTGTCACT GGGGGCACCATTAACATGATGGAGTACCTGTTGCAGGGAAGTGTTTTAGATCACAGTTTGGAAAGCCTCATCCAC CGCCTTCGTGGTTTGTGACAACATGGAACCTGAGACTTTCCTTGACCATGAGATGGTATTCCTCCTTAAGGGC CAGCAAGCCAGCCCATTTGTTCTCAGGGCCCGACGCTCTATGGACAGGGCAGGGCACCCTGGCATCTGCGCTAC CTGGGACAGCCAGAAATGGGAGACAAGAACCGCCATGCCCTGGTGCGAAACTGCGTGGACATTGCCACATCTGAG AACCTCACCGACTTCTTGATGGAAATGGGCTTCCGCATGGACCATGAGTTTGTTGCTAAGGGACATTTGTTCCGT TTGTCACTCTCCTATCTCGTGGAATTAAGTGTGGTAGCACCCGCTGGGCAGGACATGGTCTCTGATGACATGAAG AACTTCGCAGAACAGCTAAAACCTCTGGTTCACCTAGAGAAAATAGACCCCAAGAGGCTCATGTGACTAAGAGGA TTTTTGAGACAGAGTCTCGCTTTGTTTCCCAGGCTGGAGTGCAGTGGCACGATCTCGGCTCACTGCAACCTCTGC CTCCTGGGTTCAAGCAATTCTCCCACCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACATGCCACCATGCTCAG CTAATTTTTGTATTTTTAGTAGAAATGGGGATTCACCATGTTGGTCAGGCTATTCTCGAACTCCTGACCTCGTGA TCCACCCACCTTGGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACCACGCCTGGCCAAAAAAATATGTTTT GCACTGTTCTCCTCATGTGGCGATTTCACTTTCATGACAGCCTTTCTATATTAAAGGCTCAGGATGTCACGGAGA ATCTATCTAATCCCACTGTATTAAGAGGGGAAACCGGGCCAAGCGCAGTGGCTCACACCTCTAATCCCAGCACTT TGGGAGGCTGAGGTAGGTGGATCACCCAAGGTCAGGAGTTTGAGACCAGCCTGGCCAAATGGTGAAACCCCATCT CTACGAAAAATACAAAATTTAGCCGGGCATGGTAGCAGGCGCTTGTAATCCCAGCTACTTGGGAGGCTGAGGCTG GAGAATCGCTTGAACCCAGGAGGTGAAGGTTGCAGTGACCAGAGATGACGCCATTGCACTCCAGCCTGGGTGAGA AGAGCGAAACTCCGTCTCAAAAAAAAAATAAAAATGAAGAGGGGAAACCAGAATAAATTATCTTTTGGAAAGGACA ATTTCTTGTTTGGCCATTTGTGTATAAGGTTGGTAACATTAGAGGCTGTGAGCTTGTGTTACATGGTAATAAAGC CAATGAAGAG

AGCATAGAGACGGGCATTGAGCTCTTGGGCTAGAGCGTCGCCGAGTCGGAGCCGGAGCCTGAGCCGCGCGCTGTG TCTCCGCTGCGTCCGCCGAGGCCCCCGAGTGTCAGGGACAAAAGCCTCCGCCTGCTCCCGCAGACGGGGCTCATC TGCCGCCGCCGCCGCTGAGGAGTTCGCCGCCGTCGCCGCCGTGAGGATCTGAGAGCCATGTCGGCCAGCA ACGATGATGATTTTGAACCTTACTTGAGTCCACAGGCAAGGCCCAATAATGCATATACTGCCATGTCAGATTCCT ACTTACCCAGTTACTACAGTCCCTCCATTGGCTTCTCCTATTCTTTGGGTGAAGCTGCTTGGTCTACGGGGGGTG ACACAGCCATGCCCTACTTAACTTCTTATGGACAGCTGAGCAACGGAGAGCCCCACTTCCTACCAGATGCAATGT ACTTCTCAGCATGGGGAAATAACAGTTCTCAGGGACAGTCTACTCAGAGCTCTGGATATAGTAGCAATTATGCTT ATGCACCTAGCTCCTTAGGTGGAGCCATGATTGATGGACAGTCAGCTTTTGCCAATGAGACCCTCAATAAGGCTC AAGTTGTAGGTTCTGCTGTTGGTAGCGGGTCCATTACTAGTAACATCGTGGCTTCCAATAGTTTGCCTCCAGCCA CCATTGCTCCTCCAAAACCAGCATCTTGGGCTGATATTGCTAGCAAGCCTGCAAAACAGCAACCTAAACTGAAGA CCAAGAATGGCATTGCAGGGTCAAGTCTTCCGCCACCCCGATAAAGCATAACATGGATATTGGAACTTGGGATA ACAAGGGTCCCGTTGCAAAAGCCCCCTCACAGGCTTTGGTTCAGAATATAGGTCAGCCAACCCAGGGGTCTCCTC AGCCTGTAGGTCAGCAGGCTAACAATAGCCCACCAGTGGCTCAGGCATCAGTAGGGCAACAGACACAGCCATTGC CTCCACCTCCACCACAGCCTGCCCAGCTTTCAGTCCAGCAACAGGCAGCTCAGCCAACCCGCTGGGTAGCACCTC GGAACCGTGGCAGTGGGTCGGTCATAATGGGGTGGATGGTAATGGAGTAGGACAGTCTCAGGCTGGTTCTGGAT CTACTCCTTCAGAACCCCACCCAGTGTTGGAGAAGCTTCGGTCCATTAATAACTATAACCCCAAAGATTTTGACT GGAATCTGAAACATGGCCGGGTTTTCATCATTAAGAGCTACTCTGAGGACGATATTCACCGTTCCATTAAGTATA ATATTTGGTGCAGCACAGAGCATGGTAACAAGAGACTGGATGCTGCTTATCGTTCCATGAACGGGAAAGGCCCCG TTTACTTACTTTCAGTGTCAACGGCAGTGGACACTTCTGTGGCGTGGCAGAAATGAAATCTGCTGTGGACTACA ACACATGTGCAGGTGTGTGGTCCCAGGACAAATGGAAGGGTCGTTTTGATGTCAGGTGGATTTTTGTGAAGGACG TTCCCAATAGCCAACTGCGACACATTCGCCTAGAGAACAACGAGAATAAACCAGTGACCAACTCTAGGGACACTC AGGAAGTGCCTCTGGAAAAGGCTAAGCAGGTGTTGAAAATTATAGCCAGCTACAAGCACACCACTTCCATTTTTG ATGACTTCTCACACTATGAGAAACGCCAAGAGGAAGAAGAAGTGTTAAAAAGGAACGTCAAGGTCGTGGGAAAT AAAAGGCAGTTCTACACAGACTGCAGCAACGGTTGCATCTGCATATCCTAAGAGGAAAAAATGACCTTCAAGAGA ATTAGGACTTTTTTCTTAATTTCACTGACTTCAGAGACGATTGCAGACTTGCAGTTTAAGTATTGGAATTTCACA TTACTATGTTTTTCGGATTTTTAAGTCCGTAAGTGCATACAGTTTTCTCTAATTTTTAAACCCTTTCCTCCTCCC ATTTTGACATTTGCACTTGGAGAACACTTGAGTTGTGAAGGTTTTGGGCATCCACCCCAGAAAGTGGGAATTTGA TTTTATCCTTCCGAACTGGAAGAACATTTTTATGAAGAATTTTTGTCTAGGAGAATATAACAGTGTTACCCAAGG TTGTGTCTTTAAGGGTGGTTCATTTTCTCTGACCTTTTGTTACTCAAAGTAAAGTACTAGGAGTCCTAAGAAATG TTCTGTTCTTGTACATTATACTGATTAAGTCAGGATTAATTTGATTTCAAAGCTGAGAACAGTGGTAAAAACTCG TTTACAGAAATGCATTTTGGAAGAGAAAATACTGTAAAACGTGTCGTGAATGTTTCTTCAGTTTCTTCAGC CAATGAGGAAAGGGCATTGCCTTTCTTTTTACCATTAATCACTTCTCAATAAACGTGAGATCCTGTTGAGCATC

143/6881 FIGURE 135

GCTTTGCCCGCCGCCCTAAGGGGGGCTGGGGCCGGGGCCATCACTGCCGTTGCCGGGATGCCGCGGGTG TACATCGGCCGCCTGAGCTACCAGGCCCGGGAGCGCGATGTGGAGCGCTTCTTTAAGGGCTACGGGAAGATCCTG GAGGTGGATCTGAAGAACGGATATGGTTTTGTGGAGTTTGATGATCTGCGTGATGCAGATGATGCTGTTTATGAA CTGAATGGCAAAGACCTTTGTGGTGAGCGAGTAATTGTTGAGCATGCCCGCGGCCCACGGCGAGATGGCAGTTAC GGTTCTGGACGCAGTGGATATGGTTATAGAAGAAGTGGCCGAGATAAATATGGCCCTCCTACTCGCACAGAGTAC GTGACTTATGCAGATGCTCACAAGGGACGCAAAAATGAAGGGGTGATTGAATTTGTATCTTATTCTGATATGAAA AGAGCTTTGGAAAAGTTGGATGGAACTGAAGTCAATGGGAGAAAAATCAGATTAGTTGAAGACAAGCCAGGTTCC AGACGACGCCGGTCCTACTCCAGAAGCCGGAGTCATTCAAGGTCTCGCTCTCGAAGCAGACATTCCCGTAAGAGC AGAAGCCGAAGTGGCAGCAAAAGCAGTCATTCTAAGAGTAGATCTCGGTCCAGGTCGGGCTCCCGCTCCCGG AGCCGCAGCCGCAGCCATAGCGCTGGCAAGAGCCGCAGCAAGAGCCAAAGACCAAGCTGAAGAAGATCCAAAAC AATGACAATGTCGGGAAACCCAAGAGCCGGAGTCCTAGCAGGCATAAAAGTAAGAGCAAAAGTCGGAGCAGGAGT GAGAGTGAGAATGCTGGCACCAATCAGGAGACCCGGTCCAGGTCGAGATCCAAATCCAAATCGAAACCAAACCTT CCATCAGAATCACGCTCCAGATCAAAGTCAGCTTCAAAAACCCGATCTCGGTCCAAGTCTAGATCCAGGTCTGCT TCCAGATCGCCCTCCCGATCTAGATCTAGGTCCCACTCAAGGTCCTAACTGGCTATGGCCACAGCTGGAACTACC CGAGAAGTCTTTTGTACATGTTTGGTAGCCGTAGCACAAGTGATTGGAGTAGAACATGTCACTGCTGTACATTTT TAACTCCCCTAATGGTGTGTCTATAATTGTTAAATCTAAGTGCTTCCTCTCAGTAAAGCCTCCTGGCACCAGGCC TTCCTGCTCGACTGAAAAAATTTTCTCTTTGAAAATCCCCTTTTACTCATGGCCCACAGTAGAATATCCAAAAC GCCTTGGCTTTCAGGCCTGGCCTTTCCTACAGGGAGCTCAGTAACCTGGACGGCTCTAAGGCTGGAATGACCACA TAGGTAGGTATGGTGAGTTCAACCATTTTTGCTCTTGAATTGATGCCCTTCGATGTATGCCATTTAGTGAAAGTG CTAAGTCTTAAGTTTCCTACCACTTTGGTTTCATATTTTTGGACTTAACAAAGTTGTGAATAGCACAGTCGAGGA AAATTGATACCTGCAGTAACCCATAGGAAATAAACTGTAGAGTTCCATATTCTGGTATTGTGATTATATTGTTTT ATATT

FIGURE 136

AGGGTTCTCTCCCCTTGCCACCATGAGCGAGTCATTTGACTGTGCAAAATGCAACGAGTCCCTGTATGGACGCAA GTACATCCAGACAGACAGCGGCCCCTACTGTGTGCCCTGCTATGACAATACCTTTGCCAACACCTGTGCTGAGTG CCAGCAGCTTATCGGGCATGACTCGAGGGAGCTGTTCTATGAAGACCGCCATTTCCACGAGGGCTGCTTCCGCTG CTGCCGCTGCCAGCGCTCACTAGCCGATGAACCCTTCACCTGCCAGGACAGTGAGCTGCTCTGCAATGACTGCTA CTGCAGTGCGTTTTCCTCGCAGTGCTCCGCTTGTGGGGAGACTGTCATGCCTGGGTCCCGGAAGCTGGAATATGG ${\tt AGGCCAGACATGGCATGAGCACTGCTTCCTGTGCAGTGGCTGTGAACAGCCACTGGGCTCCCGTTCTTTTGTGCC}$ CGACAAGGGTGCTCACTACTGCGTGCCCTGCTATGAGAACAAGTTTGCTCCTCGCTGCGCCCGCTGCAGCAAGAC GCTGACACAGGGTGGAGTGACATACCGTGATCAGCCGTGGCATCGAGAATGTCTGGTCTGTACCGGATGCCAGAC GCCCCTGGCAGGGCAGCAGTTCACCTCCCGGGATGAAGATCCCTACTGTGTGGCCTGTTTTGGAGAACTCTTTGC ACCTAAGTGCAGCAGCTGCAAGCGCCCCATCGTAGGACTCGGTGGAGGCAAGTATGTGTCCTTTGAAGACCGACA CTGGCACCACACTGCTTCTCCTGCGCCCGCTGCTCTACCTCCCTGGTGGGCCAGGGCTTCGTACCGGATGGAGA CCAAGTGCTCTGCCAGGGCTGTAGCCAGGCCAGGGCCCTAAGCCAGGGCTCCTGGACCCAGGCTTTCCCATACCAC TCTGGGCTCCAGGATTGTCTCCCCACTCCAGCATCCCCAAACTGGTACTCCCTGACCCAGGGCCCCAAACCTGGG CTCTTACAGAGCCTCCATGAGTCAAGCCCCCTCCCCACACCTGGACTCCAGAATTCACCCTCTCCCCTGCAGTCT GGGTTCCCAGACTGAGTCCTCTCCCCAAATCAGGGCTCTAGACCCGAGCCCTCCAAACCTGGACTCTGGGACTTA GGCCCCTTAAATCTAGACTTCTCTTTATAGGTTTCAGGTCTCCTATGGGTGCCTGGGAAGTCCTTGAAAGTGGA CTGTTCTCAGGCTTGACCTGCCCCACCCCATCCCGCGGTTGAGGCTGTGGGGGCCAGCAGATCAGGAGCCCACTG ATAAGGGGCCCTAGGGTACAGGGTGCCCCAGCAGGTCGCCACCGAGTGTCTTCTCATTTTATTTCAGCTCCAT TTTGCCCATAGATGGGCAGAGGGGTGAGATTGGCTCATCCCCCTTCCAGATTCTGCAATAAAGCGGTGTGAGG

145/6881 FIGURE 137

CTACAGATACTGCCGTGTGAGAGTACCTGAGGGGCTCCTGAAAGACCTACTGCCAGGACCAGTGACCCTGGTGATGAC **GGAACGCTCGGAGGAGCTCAACAAGGACCTAAACCCTTTTACGCCTCTTGTAGGCATTCGGATTCCTGATCATGC** TTTTATGCAAGACTTGGCTCAGATGTTTGAGGGTCCGCTTGCTCTCACTAGTGCCAACCTCAGCTCCCAGGCCAG TTCTCTGAATGTCGAGGAGTTCCAGGATCTCTGGCCTCAGTTGTCCTTGGTTATTGATGGGGGACAAATTGGGGA TGGCCAGAGCCCCGAGTGTCGCCTTGGCTCAACTGTGGTTGATTTGTCTGTGCCCGGAAAGTTTGGCATCATTCG TCCAGGCTGTGCCCTGGAAAGTACTACAGCCATCCTCCAACAGAAGTACGGACTGCTCCCCTCACATGCGTCCTA AAGGCCTCATTTGCAGAGGCCACCGGAGCTAGGGCACTAGCCTGACTTTTAAGGCAGTGTGTCTTTCTGAGCACT TTTAAGGTTCAAACCAGCCAGAAGTGCTGGTGCTGTTTAAAAAGTCTCAGGTGGCTGCGTGGTGGCTCATGCC TGTAATCCCAACATTCTGGGAGGCCCAGGCGGGAGAACTGCTTGAGCCCAGGAGTTCAGAATCAGCCTGGGCAAC ATAGCAATACTCCGTCTCATAAAAATTAATAAATAAAAAGTCTCAGGTGACCAAAGGCTCCTGAAGCTAGAACCA GGTTTGGATAAAGATTGAAGAGCCACAGGCCACTCTTCCCTCTGAGCCATTGGGCCTAGTGGTGTCATGTATTGT AATTGCTCGCAGGGAGAGCAGTCTTTTTGGTGTAATAGTGGGATGTCTGCTTAGTTGGCAGGGGTTCAGTCCAAA ATTATAGTTAATTATACCCATAACACCTTTATTTAAATCCAGTGTTCTCCGCAGCCTTTTGTCTATTTATATGTG TACCAAGTGTTAAACATAATTATTATTGGGCATTTGAACTTTGTTTTTCTTTAAAGAAATGCTGCTATTAAACAT

146/6881 FIGURE 138

 ${\tt MERSEELNKDLNPFTPLVGIRIPDHAFMQDLAQMFEGPLALTSANLSSQASSLNVEEFQDLWPQLSLVIDGGQIGDGQSPECRLGSTVVDLSVPGKFGIIRPGCALESTTAILQQKYGLLPSHASYL}$

FIGURE 139A

AGGCCCAGCGCTGGCGCAGTGAGAACTTCGAGAGACCCGTGGACCTGGAGGGCTCTGGGGATGATGACTCCTTTC TTCACTGCCTGGGTCAGGCAAGTTCTTCTTGCTCTGGATCCCCAGAACAAGAAGGGCAGAACATCCTTCTGGGGA TAGAACAAGACCTGGGAGGACCTCAGGGCCCAGAATGTCCAGGTCTCCAGGGTCCCACGTCTGCATCTTTGTGTG TGCTATGTGGCTTTCTCTGCAGACCTTGCTTGGTTCCGGTGGTCCCGTCAGGTGCAATAAGCTGTGGCCAATGGT GGGGTTAGGGCAGTGATGACACAGGGCAGGTGCTTCAAGTGGTGCCTGGGATGGCCCCGCCCTGGGGAAGGGGAG ${\tt CCAGGTCAGCTGGGTCTAGCAGAATCTCGGGAGAGAGGGCACCGCGAACCCCACTCTGCCATGTAGCAACTGTGCAGCAGAGAGGGCACCGCGAACCCCACTCTGCCATGTAGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTAGCAACTGTGGGAGAACTGTGGCAACTGTGCAACTGTGCAACTGTGCAACTGTGCAACTGTGAACTGTGAACTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGTGAACTGAACTGTGAACTGAACTGTGAACAACTGAACAACTGAACAACTGAACAACTGAACAACTGAACAACTG$ TGCCCCTCGGTGCTCCCCTCCCTGAATCCCTGTATTTTCACCTGTGGATGGTGAGAAATACGACTTCTTCTCAG TGCCTCTAGGAGGGTTTGGGATAGGAAGCTGGGGTCTGGCACAGAGGAGGAGCTCTCAAAATGGTAGCAAAAAGA ${\tt AGGCAGCTGAGACTGGGCCCAGTGAGGGCACGGGCTGGCATCTGAGGAGATGGTACGGGGTCTGCACGCCACAGA}$ GCTGGCTCCCCACAGCCCTCGGCTCTCGCTCTCCTTAGCCAAGTCCTTTGAGCCTCTTTCAAATTAATCTT $\tt TGTCCCGGCTTTGCGTCAGCCAGATTGCTCAAGCAGTTCCCCTGCCTCAAGGGCTTCTTTTCCCTTTTACCCTCC$ GCCTCTGCCTCTGGGGGAAGCCCTTAGTGTACCACCCCTGCCTTGAGCTTGTGGTAGGGGTGCCTTTGGGGTCTG ACTCTTCCCAGAATGCCACTCCTGTGTTCCCCTGCAAGCCCCAGCAAGTTTTGCAGCCAGTAGCGCCTCAGTTGC ${\tt GCGGCCCCAGAATTTTTGACTTGGCAGAGAGAGATTGGGGGAACATCAGCAACTGACCACCTTTAGCTGGGCTGT}$ GCCTTCCTCCTTTCTCATCTTTTCTGGGAAAATTGGGTAAAGAGAGGGGGTTGGGAGACCTAATCTTGATGGC CATTGCTTACCTGGGATCCTCATGCCCCTCACAACCACCCAGCTCCCTAGCTCTCTCCCCTCTCCCCCACCCCCTC AGACTTCGAGCAGGAGTCGGGCATTGAGACAGCCATGCGCTTCAGCCCAGATGTAGCCCTGGCGGTGTCCACCAC ACCTGCGGTGCTGCCCACCACGAACATCCAGCCTGTGGGCACACCATTTGAAGAGCTCCCCTCTGAGCGCCCCAC $\tt CGCCACCCCAGCACCCCTGCAGCACCCCCTTTTACGGCCACCACTGCTGTTATAAGGACCACTGGCGTACGGAG$ GCTTCTGCCTCTCCCACTGACCACAGTGGCTACGGCACGGGCCACTACCCCCGAGGCGCCCTCCCCGCCCACCAC GGCGGCTGTCTTGGACACCGAGGCCCCAACACCCAGGCTGGTCAGCACAGCTACCTCCCGGCCAAGAGCCCTTCC CAGGCCGGCCACCCAGGAGCCTGACATCCCTGAGAGGAGCACCCTGCCCCTGGGGACCACTGCCCCTGGACC CACAGAGGTGGCTCAGACCCCAACTCCAGAGACCTTCCTGACCACAATCCGGGATGAGCCAGAGGTTCCGGTGAG TGGGGGGCCCAGTGGAGACTTCGAGCTGCCAGAAGAAGACCACACCACACCAGACAACCAGACATGAGGTGGTAGC TGTGGGAGGGGCTGCGCCAAGGCATCATCTCCACCTGGGACACTGCCCAAGGGTGCCCGGCCCGGGCCCTGGCCT CCTGGACAATGCCATCGACTCGGGCAGCTCAGCTGCTCAGCTGCCTCAGAAGAGTATCCTGGAGCGGAAGGAGGT TATGAAGAAAAAGGATGAGGGCAGCTACACGCTGGAGGAACCCAAGCAGGCGAGCGTCACATACCAGAAGCCTGA CAAGCAGGAGGAGTTCTATGCCTAGTGGAGCCACAGTGCCTCCCTGCAGCCTCAACACCCCTGCTGCTGCCAGTC CAAGGTCTGCCCAGGCTGCCAGCCTCACACAGATCTTCCCCGAGGAAGAGGGGGCTGCTGCCATCTGCCCCAGACT GTGCCCTTACGAGCTCATCTCTTGTTCCCCTCATCCCTGCCACCAGTCTGGGGCCTTCAGGACCTCATGTCAGATG GATGGGAGGAAGAAGCTCCTGATTGGCTGGTGGTAGAAAGGGTGGGGCTTGAGATGAGCCTGAGCCCTGAC TTGGCACCCACAGTGCTCACTGAGATCTCCTTTTTGGGGCAGAGAGGCACTCAGGCTGGTTTCCAGGACAAACAT GTGAGAGGGTGTCCCTTGTCACCAGCCTGTTTTGTCCTGGTCTCTCTGGGGTTGTTGAATCTCTCCTCTTGCCTG CCAAGTACACATGTACCCAGACTTCATTTCTTTCTGCATCTTCCCCCAAGAAACAGCTTCCTGAGGGTGCTGGGG CAGCCACTGGTGAGGAGGGGCTGCTCTGATGTCCCTCCTATGAGGGGACTCTGCACAGACACCATTGCCCACACT ATCACCATATTTTCACTCAGTCACACACACACAAGACAAAAGCATGCAATGACAAAACCATACGCAATCCTGACCGCCC CAGACACGTACTGCAATGCAAGTCACTAGTCATGGTCACATGACAGTGACAGTGTGGCCTCCTCCTACCCCAAAT

FIGURE 139B

ACACCCACACTCTGGCACCACACACATTGTCTCCAGCTTTCAGGCTTACTGGGGAGGGTGGAATCGAGCCAGAAC CAGCCGCCAACCCCAGCCAGTGTCAGACACAATCCCATGTGGATGCACAGTCTCACTCCACATGACCTGCTCTCA ATGCTGGAGGGAAACAGGCCAGGCCCTTGCCTTTCTCGGAAAAAGTGTGGGGCCACAGCCCTTTTAGGGCATTGCA TGCAGGTGGGCCTGGCTTCACCCCTACCTGCTTCCTCCCCACCGCAGCTGGCAGAGGGGGGGAGGTTTGGGGCCAGA $\tt CCCCCACTAGCTGGGGGCCTCGTGGGGGCTGGGGAGGAAATTTGGCCCCAGGTTGTTGGGGGGGTCT$ TGGGTCTCCCAGGACGGAAGGCCCAGGGCAGGGAGGGGGCCATGTGGTTGGGCTCCTTTATCTCCCTGTGTCCCCT ACCTATTTGGCCAAACAATTCTGGCTGCAGCTTCAGGGGCCCATGGCTGGAAGCAGCCCCTGCAGATCCCTCAGGC CCCGAGGTCAGGGTTTGAGGGATGAGACCAGGTGATAGTGGGGGGAGGGGTTACTTCCTTTGTTACCTAGCAAGTA GGGCTATTTCCATCGGTATTTTAAATGTGGGGTCACAGATCTTTTGGGGAGGGTGTGCTTGGCAGGGGGCCTCTT GGAGCCAAAGGGATGTGGTGTGAGTTGCGATTGGCTGGCACTCACACCCCCACCCCTCACCCACATCCCAGATTC AAGTCAGGAAGGCAGGTTTTATTTCAGGGCCCTTTTCAAGATGCCCTGGCAGCAGATTTCTGCAGGATGAGGGGT ${\tt AGCGGTGTGAGGCAGTGAGGGGAGGTTCCAGGGGCTGTCCCACAGCCTGTCTTTTCCAGGCTGGGCTCCATCT}$ TCCAGTCCCAAAACCTTCTCACAGGGCCCAGAGGCTTGTGAGGAAGCCAGGTGGACCCAGCCTTAGAAGAGTG GGCATGGGGGGCCCCTGATATCTGGAGGGGGGGGGTTGGCCTCAGTCATCTTTGGAGCAGAAGGGCTGGGTCCTG GGGCCACAGACCACAAGGCTCAGCCTCCCTACCCTGCTCCCTGGGGTGCTGCTGTCTTGGAGAGCACAGCTCTGG TGAGACGCCTGGGCAGGCCGAGGCTGAGAAACCAGGGAGGATAGAGGAGAAAAGGGCTTGGGCCCCCAGCCCCA GAAGATGCTGGACCCCAGGTGGGAGACCCAACAGTGGGTGCAGTTTCTCAGTAGGGCTGGAGCCAATGGTGGGGG TGGCCCCGGCAGGCCTGGCTCCTCACATCCCAGGGGTTGGCTTCTGATTTGGGGCTTCGGCTCCAGGCACTGGCT TCTCTTCTCTGTGTCCTTAGCATTTGAGAGAGAGGCCAGGGGCCTTGTTCATGGATCCCTGGACCCAAGGCAGA GGCAGTCCAAGAGAGTTCAGTGAGGACCAGCTAGGCTCTCCCAGGTGCAATGTGGGTGCAGGGCCCTCATGTCCC CCTACCCCTGCCTGTGATGGAGTGTTCTGAGGGGCTTTGGCATTTGCTGGAAGCACAGGGAGTTCCAAATGAGAG GACCCTGTCTCCAGGAGGCCAGGAGGCCAGATGGGGGCCTTGCCTGAAAGACTGGTCCCCTTGATCGCTGGAGGC ATGTGGGTGGCAACCAGGGCTGGGCAGGGCTTAGGGTGTGTGGGCCAAACCCCCCTGGGGTTGGCAAAGCCGCCT TGTGTTCTCTGGATTTCTCCCCAACAACTACAACCTGGACTTGCCTCCCCAGGCCTCTTGCCTGTAAATAGA AGCCCGCAAACTGTACAGATTTACAGAGGCATCGAGACTGGGCCCTGGGAGTTGCCATCTGAGAGCCGATGGCCC CAGCATCCCCCAGGTGCCTGCCTGGCACCACAGTGACCCTGGCCTCAGCGTGGCAAATGCATGTAAATATTTTTC GTAGGCAGCGTGGCTCCAGAGAGCCCCCTGAAGACAGTGTCCCTCCTCTGTGAGTCCTTTCTCTGTACAGAA CCTGCCTGGGGTGGGGGGTCTGCCATTCCCTCCCCAGGCCTTCCCTGCCCCTTCTCTCCCCTGTAACCTGT TTATTAACCATACCTGTCCTGAGTTCATGGCCAAAACCTTAAATAAGAAAAACAAAAGAAAAAGACAGTGGAAAA AAGAGACCAAGGCGCCTGCCCCACTGCGGGTACTCTCCTGTTCCAGCCTTGTGAAGGAACTGGTTTTGTTTTTGT ATAAAATTAAGCTGAAATG

GCTGAGCGGGCTTTGGACACCATGAACTTTGATGTGATTAAGGGAAAGCCAATCCGCATCATGTGGTCTCAGAGG GATCCCTCTTTGAGAAAATCTGGTGTGGGAAACGTCTTCATCAAGAACCTGGACAAATCTATAGATAACAAGGCA GACCGCAAAGTATTTGTGGGCAGATTCAAGTCTCGCAAAGAGCGGGAAGCTGAGCTTGGAGCCAAAGCCAAGGAA GGTAAGACCCTAAGTGTCAAGGTGATGAGAGATCCCAATGGGAAATCCAAAGGCTTTGGGCTTTGTGAGTTACGAA AAACACGAGGATGCCAATAAGGCTGTGGAAGAGGATGAATGGAAAAGAAATAAGTGGTAAAATCATATTTGTAGGC CGTGCACAAAAGAAAGTAGAACGGCAGGCAGAGTTAAAACGGAAATTTGAACAGTTGAAACAGGAGAGAATTAGT CGATATCAGGGGGTGAATCTCTACATTAAGAACTTGGATGACACTATTGATGATGAGAAATTAAGGAAAGAATTT TCTCCTTTTGGATCAATTACCAGTGCTAAGGTAATGCTGGAGGATGGAAGAAGCAAAGGGTTTGGCTTCGTCTGC TTCTCATCTCCTGAAGAAGCAACCAAAGCAGTCACTGAGATGAATGGACGCATTGTGGGCTCCAAGCCACTATAT AGAGCACTTCCTGCCAATGCCATCTTAAATCAGTTCCAGCCTGCAGCGGGTGGCTACTTTGTGCCAGCAGTCCCA CAGGCTCAGGGAAGGCCTCCATATTATACACCTAACCAGTTAGCACAGATGAGGCCTAATCCACGCTGGCAGCAA GGTGGGAGACCTCAAGGCTTCCAAGGAATGCCAAGTGCTATACGCCAGTCTGGGCCTCGTCCAACTCTTCGCCAT $\tt CTGGCTCCAACTGGTAATGCTCCGGCCTCTCGTGGCCTCCCTACTACCACTCAGAGAGTCGGGTCTGAGTGCCCG$ GTTCCCACAGCTGTGCAGAACTTAGCGCCACGCGCTGCTGCTGCTGCTGCTCCCCGGGCTGTTGCCCCCTAC AAATACGCCTCCAGTGTCCGCAGCCCTCATCCTGCCATACAGCCTCTGCAGGCACCCCAGCCTGCGGTCCATGTG CAGGGGCAGGAGCCACTGACTGCCTCCATGCTGGCAGCACCCCCCCAGGAACAGAAGCAGATGCTGGGAGAA AACTCTGAGCTGCACATGTTAGAGTCCCCCGAGTCTCTCCGCTCCAAGGTGGATGAAGCTGTAGCAGTTCTA CAGGCTCATCATGCCAAGAAAGAAGCTGCCCAGAAGGATTCAAAAGCCAAATAACCCCTTATGGAATTCAACTCA AGGTTTGAAGACTTCCTAGCTTGTCCTATGGACCTCAACACCAAGGATTACAAATTGCAAATTTAATAGGTCATT TTGTATCAAAAGGTCAATTATGAAGCACCTAGAATTTTTCAATTATACGAATATGTTCTTTGGGTTCTGCTGTGG ${\tt CCCAGACAGTGTTAACTTTTTTTTTTTTTTTGTGGGTTTTGATTTTTTCCCCCAGAAATTGGTTTTATTTGATGTACC}$ CAAGTCTTACGTTTCCCAATAAAGAAAAAAAATCTCCAT

 ${\tt ACCAGGCAGCCTGCGTTCGCC} {\tt ATG} {\tt AGCGACCCAAGGAGCCGAGCGGCTCCGACGGGGGGGTCCGACGGACCCATC}$ GACGTGGGCCAAGAGGGCCAGCTGAGCCAGATGGCCAGGCCGCTGTCCACCCCCAGCTCTTCGCAGATGCAAGCC AGGAAGAACGCAGAGGGATCATAGAGAAACGGCGTCGAGACCGCATCAACAGTAGCCTTTCTGAATTGCGACGC TTGGTCCCCACTGCCTTTGAGAAACAGGGCTCTTCCAAGCTGGAGAAAGCCGAGGTCTTGCAGATGACGGTGGAT CACTTGAAAATGCTCCATGCCACTGGTGGGACAGGATTCTTTGATGCCCGAGCCCTGGCAGTTGACTTCCGGAGC ATTGGTTTTCGGGAGTGCCTCACTGAGGTCATCAGGTACCTGGGGGTCCTTGAAGGGCCCAGCAGCCGTGCAGAC CCCGTCCGGATTCGCCTTCTCTCCCACCTCAACAGCTACGCAGCCGAGATGGAGCCTTCGCCCACGCCCACTGGC CCTTTGGCCTTCCCTGCCTGGCCCTGGTCTTTCTTCCATAGCTGTCCAGGGCTGCCAGCCCTGAGCAACCAGCTC GCCATCCTGGGAAGAGTGCCCAGCCCTGTCCTCCCGGTGTCTCCTCTCCTGCTTACCCCATCCCAGCCCTCCGA ACCGCTCCCCTTCGCAGAGCCACAGGCATCATCCTGCCAGCCCGGAGGAATGTGCTGCCCAGTCGAGGGGCATCT TCCACCCGGAGGGCCCGCCCCTAGAGAGGCCAGCGACCCCTGTGCCTGTCGCCCCCAGCAGCAGGGCTGCCAGG AGCAGCCACATCGCTCCCCCCAGTCTTCCTCCCCAACACCCCCTGGTCCTACAGGGTCGGCTGCTTACGTG GCTGTTCCCACCCCAACTCATCCTCCCCAGGGCCAGCTGGGAGGCCAGCGGGAGCCATGCTCTACCACTCCTGG GTCTCTGAAATCACTGAAATCGGGGCTTTC<u>TGA</u>GCTGCCCCTTCACCACCCCGCCCCAAGGAATAAGGAAGGTTC TTTTACCAGGAGCCCAAAAAAGGGCACTGCCTTTTCTGCTTTGCTTCGTGGACTGGCTCATATGTGAAGGCACGT TCTCCAGCCATCAGAGGCCCCCTCCTCCAACCCATCTCTCCTCTCACTGTTATCCCAGCTTATCCACCCAG TCAGAGATCCGCCCAGACCCCTCTCCCTGCCCCTCTGCACACCAGCAGCAGCATGAACCTTGGGTCTGGGAAAAAG CTTTAACCTGCAGGGCACCAGGACCCAAGGCAGGCTGTTCCTTGGGGCGGTCAGACCCCAGTCAGGAGCAATGAC TGACTGGCTGCAGCCTTCCCACGCCAAGAGGCTGGAACATAGTGTCTGCCTCGCTTCCTGGAGATAGTAACTGAG CAGGGGCTACAAAGAGGTCTCCTGGGAACCCTGTCTGCCCCTTCCCACCTGTCCTTGGGCCACACCATCACACTG AACCACAGGACAGACCCTTTCTCCACCACAGCCAAGGCCTGGAGACTGGGGGCCCAGCAGAGCCTGCTCCCACCC TCCTCCCAGCAGCAGCACCCCACCCTCTCACTGACTAACAGGTCCCTGCACACAGCTGGCCTGGTAAACCCAGCT GGGAGGTTTCTAGGCAGCAGCAAAACTCTGTGACAGGGTGTCCTCACACCAGGCCTTGGACAGCTCTCCCAGACA GGAGCCAGGGTTGAGCAATGGAGAGCCCAGCCCCACGTCTTACAGTCGCCATCCTCCAGGCGTGTGGTCCCTCC CCATTGGGTGCACAGTGCAGAGGGGCCCGTGGCCCCATGTGATGGTGCGCAGAGAGGAACCTCTTGGGATTCAGCA CCAGACGTCTGTGCTGCCTGGTTTGCATCCGGCTCACAGAGCCCAGACTGCTGGAACAGCCAAGGACTGTCAGGC TGGACAAAATAACTGCAAGGAGGGCAAGAGAAAGGATGATTCGAGGCACCTTGGCCCTTCAAGGTCATGCAGT GGGTCGAGCCCTGAGATCCTGTTCACCAGGACTCCACAGAGCTGGCTCTGCTCAGAAGCCATTTCATTCCCCGG CTCCACCCTAGGCCACTTTTCTAACAGAGGAAACAAATGGTCCAGCAGTCGTTCCCAGCAGAACAGCGGAGCCT GGACTGACACCCAGTGGGACCAGTGTTGCCACACCAGTTGATAAAATGCAGAAACCCTTCTGTACTCGTTGGTAA ATATCTACTCCCCCAAGTGACTCCAGGTGCCCCCCACCGCCTGGCACTTCCCCCAGGACTCCTACGATCTGGTTA TTCAGTTGTCACCCCTGGGAAGATTCTCCCACCTCCTCTCTTTGATGGAACCACCCTCCCCAGAGGCTGCATTGA GGAGACTCCACAGACTGAAAAGTGAGTTTGCAGAAACCTTGGGGAAAAGGGCCCCTTTCAAAGAAGTGGATAAGAG CCTCTTTCATTTTTTAGTGTGAGCTAATTCCATCAGACTGCTGTCCTCCTGGACCCATCTGAGATGTGCAGTAGC GGTAGAAGGAAGACACACACACACCCCCAGGATTGGGGACAGGGACAGAGGGAGACAGAAGGCAAAGG CCAGTTTCCCCGTTATCATGAAGGGGCCCACTCAGGACAGGACAAGGACAACTCCTCCTCCTCCTCCTCCTC CTGCTGCTCCTGGGATACCAGGTCAGTGATGTAGTCTTGCAGTTTGGCAACTTCCTAGCCTGAGAATCCCTAGTG GGGCTGTGGGAAACACATTTCCACGTTGCAAGCATGCAACTCCAAAGAATCTGTGATGCCACTGAAATGAGATGG CTGTGTGATCTGATTCTGTGGTCAAGGACTTGCATCTTGTGTTTCTATCCCCAAGCCTTCCTGGTGTCTCCAACT

MKRPKEPSGSDGESDGPIDVGQEGQLSQMARPLSTPSSSQMQARKKRRGIIEKRRRDRINSSLSELRRLVPTAFE KQGSSKLEKAEVLQMTVDHLKMLHATGGTGFFDARALAVDFRSIGFRECLTEVIRYLGVLEGPSSRADPVRIRLL SHLNSYAAEMEPSPTPTGPLAFPAWPWSFFHSCPGLPALSNQLAILGRVPSPVLPGVSSPAYPIPALRTAPLRRATGIILPARRNVLPSRGASSTRRARPLERPATPVPVAPSSRAARSSHIAPLLQSSSPTPPGPTGSAAYVAVPTPNS SSPGPAGRPAGAMLYHSWVSEITEIGAF

153/6881 FIGURE 144

GATCCTAAATTGCAGCAAGGCTACAATGCTATGGGATTCTCCCAGGGAGGCCAATTTCTGAGGGCAGTGGCTCAG AGATGCCCTTCACCTCCCATGATCAATCTGATCTCGGTTGGGGGACAACATCAAGGTGTTTTTTGGACTCCCTCGA TGCCCAGGAGAGAGCTCTCACATCTGTGACTTCATCCGAAAAACACTGAATGCTGGGGGCGTACTCCAAAGTTGTT CAGGAACGCCTCGTGCAAGCCGAATACTGGCATGACCCCATAAAGGAGGATGTGTATCGCAACCACAGCATCTTC TTGGCAGATATAAATCAGGAGCGGGGTATCAATGAGTCCTACAAGAAAAACCTGATGGCCCTGAAGAAGTTTGTG ATGGTGAAATTCCTCAATGATTCCATTGTGGACCCTGTAGATTCGGAGTGGTTTGGATTTTACAGAAGTGGCCAA GCCAAGGAAACCATTCCCTTACAGGAGACCTCCCTGTACACACAGGACCGCCTGGGGGCTAAAGGAAATGGACAAT GCAGGACAGCTAGTGTTTCTGGCTACAGAAGGGGACCATCTTCAGTTGTCTGAAGAATGGTTTTATGCCCACATC ATACCATTCCTTGGATGAAACCCGTATAGTTCACAATAGAGCTCAGGGAGCCCCTAACTCTTCCAAACCACATGG GAGACAGTTTCCTTCATGCCCAAGCCTGAGCTCAGATCCAGCTTGCAACTAATCCTTCTATCATCTAACATGCCC TACTTGGAAAGATCTAAGATCTGAATCTTATCCTTTGCCATCTTCTGTTACCATATGGTGTTGAATGCAAGTTTA ATTACCATGGAGATTGTTTTACAAACTTTTGATGTGGTCAAGTTCAGTTTTAGAAAAGGGAGTCTGTTCCAGATC TTCCAAGTCTTGCCATATTTCAAGCAAAGAGGTGCCCAGGCCTGAGGTACTCACATAAATGCTTTGTTTTGCTGG TGATTTAACCAGTGCTTGGAAAAATCTTGCTTGGCTATTTCTGCATCATTTCTTAAGGCTGCCTTCCTCTCAG TACGTTGCCCTCTGTGCTATCATCTTATCATCAATTATTAGACAAATCCCACTGGCCTACAGTCTTGCTTCTGCA GCACCCACTTTGTCTCCTCAGGTAGTGATGAATTAGTTGCTGTCACAAAAGGAGGGAAGTAGCACCCAAATTAAG TTGCTTAAGAGAGGAAATGTACATCTTGTATAACTTAGGGAGCGAAGAAAATGTAGGCGCGAAAGTGAAAAGTGA GGCAGCTAGTTCTTCCTATTCCATTCTCGACCAACCTGCCCTTTCTTAATATGACTAGTGGTCTTGATGCTAGAG TCAACTTACTCTGTTGCTGGCTTTAGCAGAGAATAGGAGGAACCATATGAAAAAGATCAGGCTTTCTGACTTCCA TCCCCAAAACACATTTACCAGCATACTCCAAACTGTTTCTGATGTGTTCCATGAGAAAAGGATTGTTTGCTCAAA AAGCTTGGAAAATACTACACACTCCCTTTCTCCTTCTGGAGATCAACCCACATTAGAGTGTCTAAGGACTCCTGA GAATTCCTGTTACAGTAAACAAAACTAACGTAATCTACCATTTCCTACACTATTTGAGCATGGAAATCATAGTCC CCACTCTGTGAAAACTTAACGCTTTTTGGAAGACATTTCTGTAGCATGTCAGTTTGGAGAAATGATGAGCTACGC

154/6881 FIGURE 145

GGGTCGCGGGAGATTGCTGGGGGGTTCTTGCCGGAAGCGGAGGCGGCTGATCGCAGTCCGGAGGTGAGGCGGA ACTCTGAGGCAGATATCCTCCCTTTCCTCCTCGGCTGCTCTTTACTTTGACAAGCCAGGCTAACATTGAAGGT GGTCCATTATGGCTGACATGCAAAATCTGGTAGAAAGATTGGAGAGGGCAGTGGGCCGCCTGGAGGCAGTATCTC ATACCTCTGACATGCACCGTGGGTATGCAGACAGTCCTTCAAAAGCAGGAGCAGCTCCATATGTGCAGGCATTTG ACTCGCTGCTTGCTGGTCCTGTGGCAGAGTACTTGAAGATCAGTAAAGAGATTGGGGGGAGACGTGCAGAAACATG AAAATAAGCTTTCCGATTTGTTGGCACCCATCTCAGAGCAGATCAAAGAAGTGATAACCTTTCGGGAGAAGAACC GAGGCAGCAAGTTGTTTAATCACCTGTCAGCTGTCAGCGAAAGTATCCAGGCCCTGGGCTGGGTGGCTATGGCTC CCAAGCCTGGCCCTTATGTGAAAGAAATGAATGATGCCGCCATGTTTTATACAAACCGAGTCCTCAAAGAGTACA AAGATGTGGATAAGAAGCATGTAGACTGGGTCAAAGCTTATTTAAGTATATGGACAGAGCTGCAGGCTTACATTA AGGAGTTCCATACCACCGGACTGGCCTGGAGCAAAACGGGGCCTGTGGCAAAAGAACTGAGCGGACTGCCATCTG GACCCTCTGCCGGATCAGGTCCTCCTCCCCCTCCACCATGCCCCCCTCCTCCCCCAGTCTCTACCAGTTCATGCT CATATGAGTCTGCTTCCCGCTCAGCACTGTTCGCGCAGATTAATCAGGGGGAGAGCATTACACATGCCCTGAAAC ATGTATCTGATGACATGAAGACTCACAAGAACCCTGCCCTGAAGGCTCAGAGTGGTCCAGTACGCAGTGGCCCCA AACCATTCTCTGCACCTAAACCCAAACCAGCCCATCCCCCAAACGAGCCACAAAGAAGGAGCCAGCTGTACTTG AACTGGAGGGCAAGAAGTGGAGAGTGGAAAATCAGGAAAATGTTTCCAACCTGGTGATTGAGGACACAGAGCTGA AACAGGTGGCTTACATATACAAGTGTGTCAACACGACATTGCAAATCAAGGGCAAAATTAACTCCATTACAĞTAG ATAACTGTAAGAAACTTGGCCTGGTATTCGATGACGTGGTGGGCATTGTGGAGATAATCAACAGTAAGGATGTCA AAGTTCAGGTAATGGGTAAAGTGCCAACCATATCCATCAACAAAACAGATGGCTGCCATGCTTACCTGAGCAAGA ATTCCCTGGATTGTGAAATAGTCAGTGCCAAATCTTCCGAGATGAATGTCCTCATTCCTACAGAAGGCGGTGACT TTAATGAATTCCCAGTTCCTGAGCAGTTCAAGACCCTATGGAACGGGCAGAAGTTGGTCACCACAGTGACAGAAA TCTTTTCTAGATTTCCTCTACCTTTTTGCTCTTAAAACTGCTTCTCTGCTCTGAGAAGCACAGCTACCTGCCTTC ACTGAAATATACCTCAGGCTGAAATTTGGGGTGGGATAGCAGGTCAGTTGATCTTCTGCAGGAAGGTGCAGCTTT TCCATATCAGCTCAACCACGCCGCCAGTCCATTCTTAAGGAACTGCCGACTAGGACTGATGATGCATTTTAGCTT TGTTCACACTGGTTAATCTTTTTTTAACAATGAGCATGAAGGTAGCAGAAGCTGGTGTTTCCAGATGGTTCTT CTAACCAAACTAATTTTCACTGTTGACAAGCGAGGCAAGGGTTGCACTGGACCAAAGGCTGAGGCTTGGCCATC TAGCATTCCATACAAAATTGTTTCCTATAAGCATTCCTTTTATTCTCTATTCTATCCTGGGTCTGCCTCAACCGT GAGATAGGAGAGTCTCTGGTACTAGCTGCTGTAGCAGTGCCCTTCATCCAGGGCAGTTAATGGAGTCTTGGACCC CCACATGATTTCAAGGAGTCTGGCATTCCTGAATCCTTCTTCCCTGCCAGGTGCCTGTCACCTGTCTTCACTGCC TCCTTTTCCCTGTCATGCTCATCAGCTTATGGCTTCTGTCTAAGCACCTGAACAGAGGACTGAAACCTCCACTGC AGGCTGGTTTTAGGTCTTGAATTATGTAAGAATCTTGCACAGCACTGCTAATGTAAATTTCAGTTGTTTTTCCCT CTAGGACAAACACTTACCAAAATATGCAACTTTTTTTTGGTGGGAAGAGAGATTGTCCTGTGATTTCTACCCATT TCCTGAGGCCTGTGGAAATAAACCTTTATGTACTTAAAGTTATACAGAAAATAGAATAAAGTTAATACCAAACTT

G

 $\tt TTCTCGCTCCTTGGATCGCACATCCTCCCAG{\color{blue}ATC}{ATC}{\color{blue}CAGCGCGGGACGACCCCGCGCGCGCATGAGCCGGTCTTC}$ GGGCCGTAGCGGCTCCATGGACCCCTCCGGTGCCCACCCCTCGGTGCGTCAGACGCCGTCTCGGCAGCCGCCT GCCTCACCGGTCCCGGGGAGGCGGAGGGGGATCCCGCGGGGGGCGCCGGGGCCTCGCCGCCACGCAGCCGCCACC CCCGTCCTTCACTCACGCCATGCAGCTGCTGACGGCAGAAATTGAGAAGATTCAGAAAGGAGACTCAAAAAAGGA TGATGAGGAGAATTACTTGGATTTATTTTCTCATAAGAACATGAAACTGAAAGAGCGAGTGCTGATACCTGTCAA GCAGTATCCCAAGTTCAATTTTGTGGGGAAGATTCTTGGACCACAAGGGAATACAATCAAAAGACTGCAGGAAGA GACTGGTGCAAAGATCTCTGTATTGGGAAAGGGCTCAATGAGAGACAAAGCCAAGGAGGAAGAGCTGCGCAAAGG TGGAGACCCCAAATATGCCCACTTGAATATGGATCTGCATGTCTTCATTGAAGTCTTTGGACCCCCATGTGAGGC GGAGCAATTTCTAGAGCTGTCCTACTTGAATGGAGTACCTGAACCCTCTCGTGGACGTGGGGTGCCAGTGAGAGG TGGTACACCAGTAAGGGGAGCCATCACCAGAGGTGCCACTGTGACTCGAGGCGTGCCACCCCACCTACTGTGAG GGGTGCTCCAGCACCAAGAGCACGGGCAGCGGGCATCCAGAGGATACCTTTGCCTCCACCTCCTGCACCAGAAAC ATATGAAGAATATGGATATGATGATACATACGCAGAACAAAGTTACGAAGGCTACGAAGGCTATTACAGCCAGAG TCAAGGGGACTCAGAATATTATGACTATGGACATGGGGGAGGTTCAAGATTCTTATGAAGCTTATGGCCAGGACGA CTGGAATGGGACCAGGCCGTCGCTGAAGGCCCCTCCTGCTAGGCCAGTGAAGGGAGCATACAGAGAGCACCCATA TGGACGITAT<u>TAA</u>AAACAAACATGAGGGGAAAATATCAGTTATGAGCAAAGTTGTTACTGATTTCTTGTATCTCC CAGGATTCCTGTTGCTTACCCACAACAGACAAGTAATTGTCTAAGTGTTTTTCTTCGTGGTCCCCTTCTTCTCC GAATATTGAATTAATTTTTAAGTGTGTAGATGCTTTTTTCTTTGTTGTTAAATATAAACAGAAGTGTACCTTT TAAAGGTTCTGAAGTAAAGGCTTGTTAAGTTTCTCTTAGTTTTGATTTGAGGCATCCCGTAAAGTTGTAGTTGCA GAATCCCAAACTAGGCTACATTTCAAAATTCAGGGCTGTTTAAGATTTAAAATCACAAACATTAACGGCAGTAGG CACCACCATGTAAAAGTGAGCTCAGACGTCTCTAAAAAATGTTTCCTTTATAAAAGCACATGGCGGTTGAATCTT AAGGTTAAATTTTAATATGAAAGATCCTCATGAATTAAATAGTTGATGCAATTTTTAACGTTAATTGATATAAAA AAAAAACAACAAAATTAGGCTTGTAAAACTGACTTTTTCATTACGTGGGTTTTGAAATCTAGCCCCAGACATAC ATTGAGTTTGATGCAGAGCTTTTTAGCCATGAAGAATCTTTCAGTCATAGTACTAATAATTAAATTTTCAGTATT TAAAAAGACAAAGTATTTTGTCCATTTGAGATTCTGCACTCCATGAAAAGTTCACTTGGACGCTGGGGCCAAAAG CTGTTGATTTTCTTAAGTTGACGGTTGTCAATATATCGAACTGTTCCCAAGTTAGTCAAGTATGTCTCAACACTA GCATGATATAAAAAGGGACACTGCAGCTGAATGAAAAAGGAATCAAAATCCACTTTGTACATAAGTTAAAGTCCT AATTGGATTTGTACCGTCCTCCCATTTTGTTCTCGGAAGATTAAATGCTACATGTGTAAGTCTGCCTAAATAGGT AGCTTAAACTTATGTCAAAATGTCTGCAGCAGTTTGTCAATAAAGTTTAGTCCTTTTTTA

156/6881 FIGURE 147

MQRRDDPAARMSRSSGRSGSMDPSGAHPSVRQTPSRQPPLPHRSRGGGGGSRGGARASPATQPPPLLPPSATGPD
ATVGGPAPTPLLPPSATASVKMEPENKYLPELMAEKDSLDPSFTHAMQLLTAEIEKIQKGDSKKDDEENYLDLFS
HKNMKLKERVLIPVKQYPKFNFVGKILGPQGNTIKRLQEETGAKISVLGKGSMRDKAKEEELRKGGDPKYAHLNM
DLHVFIEVFGPPCEAYALMAHAMEEVKKFLVPDMMDDICQEQFLELSYLNGVPEPSRGRGVPVRGRGAAPPPPPV
PRGRGVGPPRGALVRGTPVRGAITRGATVTRGVPPPPTVRGAPAPRARTAGIQRIPLPPPPAPETYEEYGYDDTY
AEQSYEGYEGYYSQSQGDSEYYDYGHGEVQDSYEAYGQDDWNGTRPSLKAPPARPVKGAYREHPYGRY

CTCGCGTCACAGCCGGGATGAAGCCGATCCTACTGCAGGGCCCATGAGCGGTCCATTACGCAGATTAAGTATAACC GCGAAGGACCTCCTCTTTACTGTGGCCAAGGACCCTATCGTCAATGTATGGTACTCTGTGAATGGTGAGAGGC GCTCAGCTGACAACAGCTGTCGTCTCTGGGACTGTGAAACAGGAAAGCAGCTGGCCCTTCTCAAGACCAATTCGG CTGTCCGGACCTGCGGTTTTGACTTTGGGGGCAACATCATCATGTTCTCCACGGACAAGCAGATGGGCTACCAGT GCTTTGTGAGCTTTTTTGACCTGCGGGATCCGAGCCAGATTGACAACAATGAGCCCTACATGAAGATCCCTTGCA ATGACTCTAAAATCACCAGTGCTGTTTGGGGACCCCTGGGGGAGTGCATCATCGCTGGCCATGAGAGTGGAGAGC TCAACCAGTATAGTGCCAAGTCTGGAGAGGTGTTGGTGAATGTTAAGGAGCACTCCCGGCAGATCAACGACATCC ${\tt AGTTATCCAGGGACATGACCATGTTTGTGACCGCGTCCAAGGACAACACAGCCAAGCTTTTTGACTCCACAACTC}$ TTGAACATCAGAAGACTTTCCGGACAGAACGTCCTGTCAACTCAGCTGCCCTCTCCCCCAACTATGACCATGTGG ${\tt TCCTGGGCGGTGGTCAGGAAGCCATGGATGTAACCACAACCTCCACCAGGATTGGCAAGTTTGAGGCCAGGTTCT}$ TCCATTTGGCCTTTGAAGAAGAGTTTGGAAGAGTCAAGGGTCACTTTGGACCTATCAACAGTGTTGCCTTCCATC CTGATGGCAAGAGCTACAGCAGCGGCGGAAGATGGTTACGTCCGTATCCATTACTTCGACCCACAGTACTTTG AATTTGAGTTTGAGGCT<u>TAAGAAGCTGGATCTCCTGCCGGGCGTGGTTGGCTCATGCCTGTAATCCCACCACTT</u>T $\tt TTTTTTAAGGCAGGCGGATCACCTGAGGTCAGGAGTTTAAGACCAGCCTGACCAACATGGAGAAACCTCGTCTCT$ ACTAAAAATACAAAAATTAGCCAGGCATGGTGGCACACGCCTATAGTCCCAGCTACTCAGGAGGCTGAGGCAGGA GAATCACTTGAACCCAGGAGGCAGAGGTTGCAGTGAGCTGAGATCACGTCATTGCACTCCATCCTGAGCCACAAG AGCAAAACTCCGTCTCAAAAAAAAAAAAAAAGAGGTGGATCTCCAACCAGGCCAGAGAAGATTCTCACAGAAGG TTTTGAACTCTAAGAAATAAATTGGTTTGGTAATAAATGGCTTCTGGTCAGA

158/6881 FIGURE 149

MKPILLQGHERSITQIKYNREGDLLFTVAKDPIVNVWYSVNGERLGTYMGHTGAVWCVDADWDTKHVLTGSADNS CRLWDCETGKQLALLKTNSAVRTCGFDFGGNIIMFSTDKQMGYQCFVSFFDLRDPSQIDNNEPYMKIPCNDSKIT SAVWGPLGECIIAGHESGELNQYSAKSGEVLVNVKEHSRQINDIQLSRDMTMFVTASKDNTAKLFDSTTLEHQKT FRTERPVNSAALSPNYDHVVLGGGQEAMDVTTTSTRIGKFEARFFHLAFEEEFGRVKGHFGPINSVAFHPDGKSY SSGGEDGYVRIHYFDPQYFEFEFEA

159/6881 FIGURE 150

GAGCGGAGCCGCGGGCGGAGGGCGGACGGACCGACTGACGGTAGGGACGGAGGCGAGCAAGATG CAGGGCACCCGGAGGAAAGTCTGTTACTACTACGACGGGGATGTTGGAAATTACTATTATGGACAAGGCCACCCA ATGAAGCCTCACCGAATCCGCATGACTCATAATTTGCTGCTCAACTATGGTCTCTACCGAAAAATGGAAATCTAT CGCCCTCACAAAGCCAATGCTGAGGAGATGACCAAGTACCACAGCGATGACTACATTAAATTCTTGCGCTCCATC CGTCCAGATAACATGTCGGAGTACAGCAAGCAGATGCAGAGATTCAACGTTGGTGAGGACTGTCCAGTATTCGAT GGCCTGTTTGAGTTCTGTCAGTTGTCTACTGGTGGTTCTGTGGCAAGTGCTGTGAAACTTAATAAGCAGCAGACG GACATCGCTGTGAATTGGGCTGGGGGCCTGCACCATGCAAAGAAGTCCGAGGCATCTGGCTTCTGTTACGTCAAT GATATCGTCTTGGCCATCCTGGAACTGCTAAAGTATCACCAGAGGGTGCTGTACATTGACATTGATATTCACCAT GGTGACGGCGTGGAAGAGGCCTTCTACACCACGGACCGGGTCATGACTGTGTCCTTTCATAAGTATGGAGAGTAC TTCCCAGGAACTGGGGACCTACGGGATATCGGGGCTGGCAAAGGCAAGTATTATGCTGTTAACTACCCGCTCCGA GACGGGATTGATGACGAGTCCTATGAGGCCATTTTCAAGCCGGTCATGTCCAAAGTAATGGAGATGTTCCAGCCT AGTGCGGTGGTCTTACAGTGTGGCTCAGACTCCCTATCTGGGGATCGGTTAGGTTGCTTCAATCTAACTATCAAAA GGACACGCCAAGTGTGGGAATTTGTCAAGAGCTTTAACCTGCCTATGCTGATGCTGGGAGGCGGTGGTTACACC ATTCGTAACGTTGCCCGGTGCTGGACATATGAGACAGCTGTGGCCCTGGATACGGAGATCCCTAATGAGCTTCCA TACAATGACTACTTTGAATACTTTGGACCAGATTTCAAGCTCCACATCAGTCCTTCCAATATGACTAACCAGAAC ACGAATGAGTACCTGGAGAAGATCAAACAGCGACTGTTTGAGAACCTTAGAATGCTGCCGCACCGCACCTGGGGTC CANATGCAGGCGATTCCTGAGGACGCCATCCCTGAGGAGGAGGTGGCGATGAGGACGAAGACGACCCTGACAAGCGC ATCTCGATCTGCTCCTCTGACAAACGAATTGCCTGTGAGGAAGAGTTCTCCGATTCTGAAGAGGAGGAGGAGGGG GGCCGCAAGAACTCTTCCAACTTCAAAAAAGCCAAGAGAGTCAAAACAGAGGATGAAAAAGAGAAAAGACCCAGAG GAGAAGAAGAAGTCACCGAAGAGGAGAAAACCAAGGAGGAGAAGCCAGAAGCCAAAGGGGTCAAGGAGGAGGTC AAGTTGGCCTGAATGGACCTCTCCAGCTCTGGCTTCCTGCTGAGTCCCTCACGTTTCTTCCCCAACCCCTCAGAT TTTATATITTCTATTTCTCTGTGTATTTATATAAAAATTTATTAAATATAAAAATATCCCCAGGGACAGAAACCAAG GCCCCGAGCTCAGGGCAGCTGTGCTGGGTGAGCTCTTCCAGGAGCCACCTTGCCACCCATTCTTCCCGTTCTTAA CTTTGAACCATAAAGGGTGCCAGGTCTGGGTGAAAGGGATACTTTTATGCAACCATAAGACAAACTCCTGAAATG ${\tt CCAAGTGCCTGCTTAGTAGCTTTGGAAAGGTGCCCTTATTGAACATTCTAGAAGGGGTGGCTGGGTCTTCAAGGA}$ TCTCCTGTTTTTTCAGGCTCCTAAAGTAACATCAGCCATTTTTAGATTGGTTCTGTTTTCGTACCTTCCCACTG TAGTTTCCTTTTTGAGATACTATTTTCATTTTTGTGAGCCTCTTTGTAATAAAATGGTACATTTCT

FIGURE 151

MAQTQGTRRKVCYYYDGDVGNYYYGQGHPMKPHRIRMTHNLLLNYGLYRKMEIYRPHKANAEEMTKYHSDDYIKF LRSIRPDNMSEYSKQMQRFNVGEDCPVFDGLFEFCQLSTGGSVASAVKLNKQQTDIAVNWAGGLHHAKKSEASGF CYVNDIVLAILELLKYHQRVLYIDIDIHHGDGVEEAFYTTDRVMTVSFHKYGEYFPGTGDLRDIGAGKGKYYAVN YPLRDGIDDESYEAIFKPVMSKVMEMFQPSAVVLQCGSDSLSGDRLGCFNLTIKGHAKCVEFVKSFNLPMLMLGG GGYTIRNVARCWTYETAVALDTEIPNELPYNDYFEYFGPDFKLHISPSNMTNQNTNEYLEKIKQRLFENLRMLPH APGVQMQAIPEDAIPEESGDEDEDDPDKRISICSSDKRIACEEEFSDSEEEGEGGRKNSSNFKKAKRVKTEDEKE KDPEEKKEVTEEEKTKEEKPEAKGVKEEVKLA

FIGURE 152

GGCACGAGGGCGCGGAGCGGAGCGGCGGGGGGCGCAGCTAGCGGGTCGGCCGCGGAGCGGAGGTGCAGCTCGGCT $\tt TGCGGCGAGCCCGGGGCGGCTCCAAGCGCCCCCCAGCAGACCCCCATC \underline{ATG}GGCAGCCAGAGCTCCAAGGCTCCCCAGCAGCCCCCATC \underline{ATG}GGCAGCCCAGAGCTCCAAGGCTCAAGGCTCCAAGGCTCCAAGGCTCCAAGGCTCCAAGGCTCAAGGCTCCAAGGCTCAAG$ CCCGGGGCGACGTGACCGCCGAGGAGGCAGCAGCCGTTCCCCCGCGAAGGCCAACGGCCAGGAGAATGGCCACG TGAAAAGCAATGGAGACTTATCCCCCAAGGGTGAAGGGGAGTCGCCCCTGTGAACGGAACAGATGAGGCAGCCG GGGCCACTGGCGATGCCATCGAGCCAGCACCCCCTAGCCAGGGTGCTGAGGCCAAGGGGGAGGTCCCCCCAAGG AGACCCCCAAGAAGAAGAAGAAATTCTCTTTCAAGAAGCCTTTCAAATTGAGCGGCCTGTCCTTCAAGAGAAATC GGAAGGAGGTGGGGGTGATTCTTCTGCCTCCTCACCCACAGAGGAAGAGCAGGAGCAGGGGGGAGATCGGTGCCT GCAGCGACGAGGCACTGCTCAGGAAGGGAAGGCCGCAGCCACCCTGAGAGCCAGGAACCCCAGGCCAAGGGGG CAGAGGCTAGTGCAGCCTCAGAAGAAGAGGCAGGGCCCCAGGCTACAGAGCCATCCACTCCCTCGGGGCCGGAGA GTGGCCCTACACCAGCCAGCGCTGAGCAGAATGAG<u>TAG</u>CTAGGTAGGGGCAGGTGGGTGATCTCTAAGCTGCAAA CTCTTAAGGCCAGTTGAAGATGGTCCCTTACAGCTTCCCAAGTTAGGTTAGTGATGTGAAATGCTCCTGTCCCTG GCCCTACCTCCCTGTCCCCACCCCTGCATAAGGCAGTTGTTGGTTTTCTTCCCCAATTCTTTTCCAAGTAG GTTTTGTTTACCCTACTCCCCAAATCCCTGAGCCAGAAGTGGGGTGCTTATACTCCCAAACCTTGAGTGTCCAGC CTTCCCCTGTTGTTTTTAGTCTCTTGTGCTGTGCCTAGTGGCACCTGGGCTGGGGAGGACACTGCCCCGTCTAGG TTTTTATAAATGTCTTACTCAAGTTCAAACCTCCAGCCTGTGAATCAACTGTGTCTCTTTTTTGACTTGGTAAGC

162/6881 FIGURE 153

GCTCCCATTGGCTGATGTTGGCGCGAAGGTGCGCGAGTCAGCCCTCGCGCTGGGGGGCGCAGGAAACAATAGAGGC CGCGCGCACAGAGCGAGCTCTTGCAGCCTCCCGCCCCTCCCGCAACGCTCGACCCCAGGATTCCCCCGGCTCGC CTGCCCGCCATGGCCGACAAGGAAGCAGCCTTCGACGACGACGAGGAAGAACGAGTGATCAACGAGGAATACAAA ATATGGAAAAAGAACACCCCTTTTCTTTATGATTTGGTGATGACCCATGCTCTGGAGTGGCCCAGCCTAACTGCC CAGTGGCTTCCAGATGTAACCAGAATTTGGAGGTTTTGGTTCAGTTAGTGGAAAAATTGAAATAGAAATCAAGAT CAACCATGAAGGAGAAGTAAACAGGGCCCGTTATATGCCCCAGAACCCTTGTATCATCGCAACAAAGACTCCTTC CAGTGATGTTCTTGTTTTTGACTATACAAAACATCCTTCTAAACCAGATCCTTCTGGAGAGTGCAACCCAGACTT TTCAGATGACCATACCATCTGCCTGTGGGACATCAGTGCCGTTCCAAAGGAGGGGAAAAGTGGTAGATGCGAAGAC CATCTTTACAGGGCATACGGCAGTAGTAGAAGATGTTTCCTGGCATCTACTCCATGAGTCTCTGTTTGGGTCAGT TGCTGATGATCAGAAACTTATGATTTGGGATACTCGTTCAAACAATACTTCCAAACCAAGCCACTCAGTTGATGC TCACACTGCTGAAGTGAACTGCCTTTCTTTCAATCCTTATAGTGAGTTCATTCTTGCCACAGGATCAGCTGACAA GACTGTTGCCTTGTGGGATCTGAGAAATCTGAAACTTAAGTTGCATTCCTTTGAGTCACATAAGGATGAAATATT CCAGGTTCAGTGGTCACCTCACAATGAGACTATTTTAGCTTCCAGTGGTACTGATCGCAGACTGAATGTCTGGGA TTTAAGTAAAATTGGAGAGGAACAATCCCCAGAAGATGCAGAAGACGGGCCACCAGAGTTGTTGTTTATTCATGG ${\tt TGGTCATACTGCCAAGATATCTGATTTCTCCTGGAATCCCAATGAACCTTGGGTGATTTGTTCTGTATCAGAAGA}$ CAATATCATGCAAGTGTGGCAAATGGAGTTAGTCCTTGACCACTAGTTTGATGCCATCTCCATTTTGGGTGACCT ${\tt GTTTCACCAGGAGGCCTGTTACTCTCCATGACTAACTGTGTAAGTGCTTAAAATGGAATAAATTGCTTTTCTACA}$ TAA

FIGURE 155A

GGCTCGCATCCCCATAGTGCTGGGTTACAGTGAAGGTACGCCCCGCGCTCTGCTCTGGAGAGGCAGGGTGGGATA TAAGAAGAAGGCTCTGCCAAGGCTGAGAATGACAAACATCTAAGTGTAGGGCCTGGCCAGGGGCCAGGGTCTGC AGTGGATGAGCACCAGGACAACGTCTTCTTTCCCAGTGGGCGACCCCCCACCTGGAAGAGCTGCACACTCAGGC CCAGGAGGGGCTCCGCTCCCTACAACACCAAGAGAAACTGAACAAGGGTGGCTGGGACCATGGAGACAC CCAGAGTATCCAGTCCTCCCGGACGGGCCGGATGAAGACAACATCTCCTTCTGCAGTCAGACCACCTCCTACGT GGCTGAGAGCTCCACAGCAGAGGACGCGCTCTCCATCCGCTCGGAGATGATCCAGCGCAAAGGCTCCACCTTCCG ACCCCATGACTCATTTCCCAAATCTGGAAAGTCAGGGCGGCGTCGGCGGGAGCGCGGAGCACTGTGCTGGGACT $\verb|CCCGCAGCATGTGCAGAAGGAGCTTGGCCTGAGGAATGAGCGTGAGGCACCAGGCACGCCCCGGGCTCCTGGTGC| \\$ ACGGGATGCCGTACGCATCCCCACAGTGGACGCCCCCCGAGGCACCTCAGGGATGGGGGCCCGGGTGTCCCT GCAGGCGCTGGAGGCGGAGGCTGGCGCTGAGACAGAGGCCATGCTGCAGCGCCACATTGACCGTGTCTA $\tt CCGGGATGACACCTTTGTTGGCCGGTCCACGGGTACCCGGGCCCCACCATTGACCCGGCCCATGTCCCTAGCAGT$ GCCTGGATTGACAGGAGGGCCAGGGCCTGCAGAGCCCCTGAGCCCGGCCATGTCCATCTCCCCCCAGGCCACCTA CCTGTCGAAGTTGATTCCACATGCTGTGCTGCCGCCTACAGTGGACGTGGTGGCCCTAGGCCGCTGCAGCCTGCG CAGCCCACAGCCGCAGCCGCCACCCATCCTCCTCCAGTGACACCTGGAGCCACTCTCAATCCTCCGACACCAT TGTGTCTGACGGTTCCACCCTCTCCTCTAAGGGTGGCTCTGAGGGCCAGCCGGAGAGCTCTACGGCTAGCAATAG CGTGGTACCCCCTCCCCAGGGAGGCAGTGGGAGGGGCTCTCCCAGTGGGGGCAGCACTGCTGAGGCCTCAGACAC TCCCCGCCGGACCCACTCCCTCCATCAGCGGGGCTTAGCAGTGCCTGATGGGCCATTAGGGTTGCCCCCTAAGCC TCCACCCAACCCAGCCAACAGCTGGGTACCTGGCTTGTCTCCGGGTGGTTCCCGGCCCCCCACGGTCCCCAGA ${\tt ACGGACACTTTCGCCCTCCAGTGGATACTCGAGCCAAAGTGGTACTCCCACCCTCCCAAGGGCCTGGCAGGCCAGGGCAGGGCCAGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGGCCAGGCCAGGCCAGGGCCAGGGCCAGGGCCAGGCCAGGGCCAGGGCCAGGGCCAGGGC$ TCCCCCTGCTTCCCCAGGCAAGGCCCAGCCCCCTAAACCAGAGCGTGTCACGTCTCTTCGCTCCCCTGGGGCCTC CGTCTCCTCTCCCTCACGTCTTTATGTTCCTCCTCTCTGACCCAGCCCCCTCAGACCGCTCTGGGCCACAGAT TGACGCCAGTCCTCAGTCCCCTCCCCACTCCCCAGACAACCTTGACTCCACTGCAGGAGTCTCCTGTCATCTCCAA TGTGGAGGCACCATCTGCCTCAGAGACTGCTGAGGAGCCCCTCCAAGATCCCAACTGGCCCCCTCCCCCACCCCC TGCCCCTGAGGAGCAGGACCTGTCCATGGCTGACTTCCCCCCACCAGAGGAGGCTTTTTTCTCTGTGGCCAGCCC TGAGCCTGCAGGCCCTTCAGGCTCCCCAGAGCTTGTCAGCTCCCCGGCTGCTTCGTCCTCCTCAGCTACTGCTTT GCAGATTCAGCCCCGGGTAGCCCAGACCCTCCTCCAGCTCCGCCAGCCCCAGCTCCTGCTAGTTCCGCCCCAGG GCATGTGGCCAAGCTCCCTCAGAAGGAACCGGTGGGCTGTAGCAAGGGTGGTGGGCCTCCCAGGGAGGACGTAGG TGCGCCCCTGGTCACGCCCTCGCTCCTGCAGATGGTGCGGCTGCGCTCCGTGGGTGCTCCAGGAGGGGCTCCCAC CCCCTCCTCAGGGCTCCATGCTGCGGTCCGACTCAAGGCCTGCAGCCTGGCCGCCAGTGAAGGCCTCTCAAGTGC TCAGCCCAACGGACCGCCTGAGGCAGAGCCACGGCCTCCCCAGTCCCCTGCCTCAACGGCCAGTTTCATCTTCTC CAAGGGCTCTAGGAAGCTGCAGCTGGAGCCGGCCCGTGTCCCCTGAGACCCAGGCTGACCTCCAGCGGAATCTGGT GGCAGAACTCCGGAGCATCTCAGAGCAGCGGCCACCCCAGGCCCCAAAGAAGTCACCTAAGGCTCCCCCACCTGT GGCCCGCAAGCCGTCTGTGGGAGTCCCCCCACCCGCCTCCCCAGTTACCCTCGAGCTGAGCCCCTTACTGCTCC TCCCACCAATGGGCTCCCTCACACCCAGGACAGGACTAAGAGGGAGCTGGCGGAGAATGGAGGTGTCCTGCAGCT $\tt GGTGGGCCCAGAGGAGAAGATGGGCCTCCCGGGCTCAGACTCACAGAAAGAGCTGGCC\underline{TGA}CCACCAGGCACCTC$ ACTGGCACTGCTGACCCATCCCAGAAACACAATCTCAGGGACCCGAGCAGCTCCAAGGACGAGAGGATACAGCAG ${\tt ACACAACCTAATAGAGAGGGGGCCTGCAGCCTTAACCTCCACGGCCTTCGATACTTATGCAAGCCTGGTGTTGCT}$ ${\tt CCTGTCCTCAGAGTCATCCTGCGCTCATGCCTTTTCCCGAATGGGTTCACCTCTGGCAGTTGCCGCTTCAGTCTT}$ GGCCTTAGCCTCATCTTGAAGTGGGTAGCTGGCGGGAGAGGGTGGCTGCCCCCTGCTGGCCCTGAGGCTGCAG AGTTGGGAGCAGGACACCTCACCTGAGTTTCATTTTTTTCATGTCCAAACCATGCACATACTATAGTCCAGAAT

165/6881 FIGURE 155B

CAAAGCACTTTTGAAAAGTGGCTGCATGGCCATCCTCCAGGGCCCAGGAAGTTGCATTCCAAGGGCCTGTTTACA TGGCAGCAGAATCCATCCCCGGCAGTCAGCCCATAGCTTGGGACCAGTCTGTGCCCTCCTGCCCAGTCCAGTTTA CTCCTCTTGGTTCCTGAAGGTGGCCAAGTCATTGTGTTCCCACAGGCTTCTCTAGGCTGGGGGCAGGTGTGGGGC CTTCCAGTTCTGCCAGGTGCTCCATGCTGGGGACAAGTAGGAGACTGCCAGGGCCCAAAGAAATGGGTGAGCAGT CGGTGCATGTCCTTTCTGCAGCTGCCTTTCAGCACAGGTGGTTCCACTGGGGGCAGCTAACGCTGAGTGACAAGG ATGGGAAGCCACAGGTGCATTTTACTCAAGTCTTCTCTAGTCAATGAGGGGCACCCAGTGCTTCTAGGGCAGGCT GGGTGGTGCCCCTAGGTATCAGCCTCTCTTACTGTACTCTCCGGGAATGTTAACCTTTCTATTTTCAGCCTGT GCCACCTGTCTAGGCAAGCTGGCTTCCCCATTGGCCCCTGTGGGTCCACAGCAGCGTGGCTGCCCCCCAGGGCCA CCGCTTCTTTCTTGATCCTCTTTCCTTAACAGTGACTTGGGCTTGAGTCTGGCAAGGAACCTTGCTTTTAGCTTC ACCACCAAGGAGAGAGGTTGACATGACCTCCCCGCCCCTCACCAAGGCTGGGAACAGAGGGGGATGTGGTGAGAG ATTCTTCCCTTGCCTGTGGGCAGTGGAGAGTGCTGCTGGGTGTACGCTGCACCTGCCCACTGAGTTGGGGAAAGA GGATAATCAGTGAGCACTGTTCTGCTCAGAGCTCCTGATCTACCCCACCCCCTAGGATCCAGGACTGGGTCAAAG ACAAAGGAGAAGGGGCTCTAGAAGAGGCCCCTTCTTTGTCCTCTGGGGTAAATGAGCTTGACCTAGAGTAA AACTGTGTTTCATTTAAAGATGTTAATTAAATGATTGAAACTTG

MVVFVGRRLPALLGLFKKKGSAKAENDKHLSVGPGQGPGSAVDEHQDNVFFPSGRPPHLEELHTQAQEGLRSLQH
QEKQKLNKGGWDHGDTQSIQSSRTGPDEDNISFCSQTTSYVAESSTAEDALSIRSEMIQRKGSTFRPHDSFPKSG
KSGRRRERRSTVLGLPQHVQKELGLRNEREAPGTPRAPGARDAVRIPTVDGRPRGTSGMGARVSLQALEAEAEA
GAETEAMLQRHIDRVYRDDTFVGRSTGTRAPPLTRPMSLAVPGLTGGAGPAEPLSPAMSISPQATYLSKLIPHAV
LPPTVDVVALGRCSLRTLSRCSLHSASPASVRSLGRFSSVSSPQPRSRHPSSSSDTWSHSQSSDTIVSDGSTLSS
KGGSEGQPESSTASNSVVPPPQGGSGRGSPSGGSTAEASDTLSIRSSGQLSGRSVSLRKLKRPPPPPRRTHSLHQ
RGLAVPDGPLGLPPKPERKQQPQLPRPPTTGGSEGAGAAPCPPNPANSWVPGLSPGGSRRPPRSPERTLSPSSGY
SSQSGTPTLPPKGLAGPPASPGKAQPPKPERVTSLRSPGASVSSSLTSLCSSSSDPAPSDRSGPQILTPLGDRFV
IPPHPKVPAPFSPPPSKPRSPNPAAPALAAPAVVPGPVSTTDASPQSPPTPQTTLTPLQESPVISKDQSPPPSPP
PSYHPPPPPTKKPEVVVEAPSASETAEEPLQDPNWPPPPPPAPEEQDLSMADFPPPEEAFFSVASPEPAGPSGSP
ELVSSPAASSSSATALQIQPPGSPDPPPAPPAPAPASSAPGHVAKLPQKEPVGCSKGGGPPREDVGAPLVTPSLL
QMVRLRSVGAPGGAPTPALGPSAPQKPLRRALSGRASPVPAPSSGLHAAVRLKACSLAASEGLSSAQPNGPPEAE
PRPPQSPASTASFIFSKGSRKLQLERPVSPETQADLQRNLVAELRSISEQRPPQAPKKSPKAPPPVARKPSVGVP
PPASPSYPRAEPLTAPPTNGLPHTQDRTKRELAENGGVLQLVGPEEKMGLPGSDSQKELA

FIGURE 157

ATGGGGGACGCTCCCAGCCCTGAAGAGAACTGCACCTTATCACCCGGAACCTGCAGGAGGTTCTGGGGGAAGAG AAGCTGAAGGAGATACTGAAGGAGCGGGAACTTAAAATTTACTGGGGAACGACCACACGGGCAAACCACATGTG GCTTACTTTGTGCCCATGTCAAAGATTGCAGACTTCTTAAAGGCAGGGTGTGAGGTAACAATTCTGTTTGCGGAC CTCCACGCATACCTGGATAACATGAAAGCCCCATGGGAACTTCTAGAACTCCGAGTCAGTTACTATGAGAATGTG ATCAAAGCAATGCTGGAGAGCATTGGTGTGCCCTTGGAGAAGCTCAAGTTCATCAAAGGCACTGATTACCAGCTC AGCAAAGAGTACACACTAGATGTGTACAGACTCTCCTCCGTGGTCACACAGCACGATTCCAAGAAGGCTGGAGCT GAGGTGGTAAAGCAGGTGGAGCACCCTTTGCTGAGTGGCCTCTTATACCCCGGACTGCAGGCTTTGGATGAAGAG TATTTAAAAGTAGATGCCCAATTTGGAGGCATTGATCAGAGAAAGATTTTCACCTTTGCAGAGAAGTACCTCCCT GCACTTGGCTATTCAAAACGGGTCCATCTGATGAATCCTATGGTTCCAGGATTAACAGGCAGCAAAATGAGCTCT TCAGAAGAGGAGTCCAAGATTGATCTCCTTGATCGGAAGGAGGATGTGAAGAAAAAACTGAAGAAGGCCTTCTGT GAGCCAGGAAATGTGGAGAACAATGGGGTTCTGTCCTTCATCAAGCATGTCCTTTTTCCCCTTAAGTCCGAGTTT GTGATCCTACGAGATGAGAAATGGGGTGGAAACAAAACCTACACAGCTTACGTGGACCTGGAAAAGGACTTTGCT GCTGAGGTTGTACATCCTGGAGACCTGAAGAATTCTGTTGAAGTCGCACTGAACAAGTTGCTGGATCCAATCCGG GAAAAGTTTAATACCCCTGCCCTGAAAAAACTGGCCAGCGCTGCCTACCCAGATCCCTCAAAGCAGAAGCCAATG GCCAAAGGCCCTGCCAAGAATTCAGAACCAGAGGAGGTCATCCCATCCCGGCTGGATATCCGTGTGGGGAAAATC ACTGTGGTGAGCGGCCTGGTACAGTTCGTGCCCAAGGAGGAACTGCAGGACAGGCTGGTAGTGGTGCTGTGCAAC CTGAAACCCCAGAAGATGAGAGGAGTCCGAGTCCCAAGGCATGCTTCTGTGTGCTTCTATAGAAGGGATAAACCGC CAGGTTGAACCTCTGGACCCTCCGGCAGGCTCTGCTCCTGGTGAGCACGTGTTTGTGAAGGGCTATGAAAAGGGC CAACCAGATGAGGAGCTCAAGCCCAAGAAGAAGTCTTCGAGAAGTTGCAGGCTGACTTCAAAATTTCTGAGGAG TGCATCGCACAGTGGAAGCAAACCAACTTCATGACCAAGCTGGGCTCCATTTCCTGTAAATCGCTGAAAGGGGGG $\texttt{AACATTAGC} \underline{\textbf{TAG}} \texttt{CCAGCCCAGCATCTTCCCCCCTTCTTCCACCACTGAGTCATCTGCTGTTCTTCAGTCTGCTC}$ CATCCATCACCCATTTACCCATCTCTCAGGACA

168/6881 FIGURE 158

MGDAPSPEEKLHLITRNLQEVLGEEKLKEILKERELKIYWGTATTGKPHVAYFVPMSKIADFLKAGCEVTILFAD LHAYLDNMKAPWELLELRVSYYENVIKAMLESIGVPLEKLKFIKGTDYQLSKEYTLDVYRLSSVVTQHDSKKAGA EVVKQVEHPLLSGLLYPGLQALDEEYLKVDAQFGGIDQRKIFTFAEKYLPALGYSKRVHLMNPMVPGLTGSKMSS SEEESKIDLLDRKEDVKKKLKKAFCEPGNVENNGVLSFIKHVLFPLKSEFVILRDEKWGGNKTYTAYVDLEKDFA AEVVHPGDLKNSVEVALNKLLDPIREKFNTPALKKLASAAYPDPSKQKPMAKGPAKNSEPEEVIPSRLDIRVGKI ITVEKHPDADSLYVEKIDVGEAEPRTVVSGLVQFVPKEELQDRLVVVLCNLKPQKMRGVESQGMLLCASIEGINR QVEPLDPPAGSAPGEHVFVKGYEKGQPDEELKPKKKVFEKLQADFKISEECIAQWKQTNFMTKLGSISCKSLKGG NIS

TTCATGCTGCGTTCATTCCTTTTGGAGACATCACAGATATTCAGATTCCTCTGGATTATGAAACAGAAAAGCACC CAGATGATGACTGGTTGAAGAAGTTTTCTGGGAAGACGCTTGAAGAGAATAAAGAGGAAGAAGGGTCAGAGCCTC CCAAAGCAGAGACCCAGGAGGGAGAGCCCATTGCTAAAAAGGCCCGCTCAAATCCTCAGGTGTACATGGACATCA AGATTGGGAACAAGCCGGCTGGCCGCATCCAGATGCTCCTGCGTTCTGATGTCGTGCCCATGACAGCAGCAGAAATT TCCGCTGCCTGTGCACTCATGAAAAGGGCTTTGGCTTTAAGGGAAGCAGCTTCCACCGCATCATCCCCCAGTTCA TGTGCCAGGGCGGTGATTTCACAAACCACAATGGCACTGGGGGCAAGTCCATCTATGGGAAGAAGTTCGATGATG AAAACTTTATCCTCAAGCATACGGGACCAGGTCTACTATCCATGGCCAACTCTGGCCCAAACACCAATGGCTCTC AGTTCTTCCTGACATGTGACAAGACAGACTGGCTGGATGGCAAGCATGTGGTGTTTTGGAGAGGGTCACCGAAGGCC TAGATGTCTTGCGGCAAATTGAGGCCCAGGGCAGCAAGGAGGGAAGCCAAAGCAGAAGTGATCATCGCCGACT GGTCTGCTTGGAGCAGCTCCTCTGCAGGCACAGCCTGGACTATTCCCAGGCACAGCTGTGGGCCCAGGAGCCAGC TCAGGTGCTCCCCCCCACCATGGGCAGGCTGTGCAAAAAAGCCACTGGCTTTTCTCAGCATTTGCTGCTGGGCCT AAAAAAAAA

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170/6881 FIGURE 160

MATTKRVLYVGGLAEEVDDKVLHAAFIPFGDITDIQIPLDYETEKHRGFAFVEFELAEDAAAAIDNMNESELFGR TIRVNLAKPMRIKEGSSRPVWSDDDWLKKFSGKTLEENKEEEGSEPPKAETQEGEPIAKKARSNPQVYMDIKIGN KPAGRIQMLLRSDVVPMTAENFRCLCTHEKGFGFKGSSFHRIIPQFMCQGGDFTNHNGTGGKSIYGKKFDDENFI LKHTGPGLLSMANSGPNTNGSQFFLTCDKTDWLDGKHVVFGEVTEGLDVLRQIEAQGSKDGKPKQKVIIADCGEY

FIGURE 161

AAGCCTGGCGGCAGTCAGCAGTGTCACCCTCCCACACCTGATACTGGGCCTCAGAATGGACATCCCGAGGGCGTG CCCCACACCCCTCAACGCAGGTTCCAGCACACTTCAGCTGTCATCTTACAACTGCAGCCTGCTTCACCAGTGCCC CAGCAGTGTGTCCCTGATGACTGGAAAGAAGTGGCCACCAGGGGAGAAAAGTGTGCCTGAGACGCGGTCTGGCCCA TCACCACATCAGCAGGCTATTGTCACTGCCATGCCTGGTGGCCTGTACCCACGAGCCCTAACATCCAGCCG AACGGAAACTCTGCCTCCAGCATCGCCGGCACTGCCCCCCAGAATGGTGAGAATAAACCACCACAGGCCATTGTG CACACCACCACCACTGACTCGGAGATGGAGGAGCCCTATCTGCAAGAATCCAAAGAGGGGGGGTGCTCCCCTCAAA CTCAAGTGTGAGCTCTGTGGCCGGGTGGACTTTGCCTATAAGTTCAAGCGTTCCAAGCGCTTCTGTTCCATGGCT TGTGCAAAGAGGTACAACGTGGGATGCACCAAACGGGTGGGACTTTTCCACTCAGACCGGAGCAAGCTGCAGAAG GCAGGAGCTGCGACCCACAACCGCCGTCGGGCCAGCAAAGCCAGTCTGCCACCACTTACCAAGGATACCAAGAAG CAGCCAACAGGCACTGTGCCCCTTTCGGTTACTGCTGCTTTTGCAGCTAACACACAGCCAGGAAGACTCCAGCCGT GGCCAGCGGGACCTGGAGCTCCCCGACATGCATATGCGGGACCTGGTGGGCATGGGACACCACTTCCTGCCAAGT GAGCCCACCAAGTGGAATGTAGAAGACGTCTACGAATTCATCCGCTCTCTGCCAGGCTGCCAGGAGATAGCAGAG GAATTCCGTGCCCAGGAAATCGACGGGCAAGCCCTGCTGCTGCTCAAGGAGGACCACCTGATGAGCGCCATGAAC ${\tt ATCAAGCTGGGGCCCGCCTGAAGATCTACGCCCGCATCAGCATGCTCAAGGACTCC} {\color{red}{\underline{\textbf{TAG}}}} {\color{red}{\textbf{GGCTGGTGGCAGCCA}}}$ CGGTTGGAGGGCAGGGGCTCTCCCTAGGGGCATAGCTGGTGAGGAGGTCTGGGCACCTCCTCCATGGCTCTCAGG GGCCTTTCATTTCTGTGGGAGGGGCAGAGAGGTAGGTGGCACAGAAGATGGGGCTTTATGCTTGTAAATATTGAT AGCACTGGCTTCCTCCAAAGTCCCAATACTCTAGCCCCGCTCTCTTCCCCCTCTTTCTGTCCCCCATTTTCCAGGG ${\tt AAGCCCTTGCCTTCCTCCCACTTCTTTCTCCAGGCCTGGTTAACTCTTCCGTTGTCAGCTTCTCCCCCTTC}$ GATAGGCCAAGGGCTACTCTCGGCATCTCCAGGTGTTTTGTAGCAAACAGCCACTTAGTGCTTTGTCCTGGACT CCACTCAGCCTCAGGATGGGGAATAGCCAAGAATGGCAGCCTCAGCGCAGAGGCAAGGTCAGAAAGAGACGGCGC TTCAGAGTTTCCTTTCCAGACACCCCTCCCCGCACTGTGAAGTTCCCCTGACCGCCCTCCTGGTTCACAAAGAGC GGGAGTCCCAGTGGTGAGGCTCAGAGAACTGCTAAGGGGAAAGAACAGCTGGAGTTTCTGTTGATGTGAAGAAGA CAGCTCTTGGCCTCCCACTCCCACACTTCTTTGCCTATAAATCTTCCTAGCAGCAATTTGAGCTACCTGAGGAGG AGCTTATTCTATTCCCCACCCCACCCCCAGGCAGGCTTGGAAATGAAGGACTTTTTTAACCTTTGTTTTT TTAAAAATAAATCTGTAAAATCTG

MPLGPVTPALPLQCPTANLHKPGGSQQCHPPTPDTGPQNGHPEGVPHTPQRRFQHTSAVILQLQPASPVPQQCVPDWKEVAPGEKSVPETRSGPSPHQQAIVTAMPGGLPVPTSPNIQPSPAHETGQGIVHALTDLSSPGMTSGNGNSASSIAGTAPQNGENKPPQAIVKPQILTHVIEGFVIQEGAEPFPVGRSSLLVGNLKKKYAQGFLPEKLPQQDHTTTTDSEMEEPYLQESKEEGAPLKLKCELCGRVDFAYKFKRSKRFCSMACAKRYNVGCTKRVGLFHSDRSKLQKAGAATHNRRRASKASLPPLTKDTKKQPTGTVPLSVTAALQLTHSQEDSSRCSDNSSYEEPLSPISASSSTSRRRQGQRDLELPDMHMRDLVGMGHHFLPSEPTKWNVEDVYEFIRSLPGCQEIAEEFRAQEIDGQALLLLKEDHLMSAMNIKLGPALKIYARISMLKDS

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173/6881 FIGURE 163

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174/6881 FIGURE 164

 ${\tt MAFPVGLESSSPMTVIFSKKYEERGRAWWLTSVILANHSGLQPTPSSLTGQLETSVPPCLPPLTQGPIGMIRGSQLSVIKHSNCNWLLELSIVE}$

GGCGAGCAGTCTGCGCGCGCATCGCCGCAGCGGCGATGGCGGCAGCGGCAGGTGGAGGGGCTGGCGCCCGCT CCCTCTCGCGCTTCCGAGGCTGCCTGGTGCGCTGCTCGGGGACTGCGTGGGCTCCTTCTACGAGGCCCACG ACACCGTCGACCTGACGTCAGTCCTGCGTCATGTCCAGAGTCTGGAGCCGGACCCCGGCACGCCCGGGAGTGAGC GGACAGAAGCCTTGTACTACACAGATGACACAGCCATGGCCAGGGCCCTGGTGCAGTCCCTGCTAGCCAAGGAGG GAGTAGTCACTGTCTTCAAGAAGCTCCTGAACCCCAAATGTCGCGATGTCTTTGAGCCTGCCCGGGCCCAGTTTA ACGGGAAAGGCTCCTATGGCAATGGAGGTGCCATGCGGGTGGCTGCCATCTCCCTGGCCTATAGCAGTGTCCAGG ATGTGCAGAAGTTTGCCCGGCTCTCGGCCCAGCTGACACACGCCTCCTCCCTGGGTTACAATGGCGCCATCCTGC AGGCCCTGGCTGTGCACCTGGCCTTGCAGGGCGAGTCTTCCAGCGAGCACTTTCTCAAGCAACTCCTGGGCCACA TGGAGGATCTGGAGGGTGATGCCCAGTCCGTCTTGGATGCCAGGGAGTTGGGCATGGAGGAGCGTCCATACTCCA GCCGCCTGAAGAAGATTGGAGAGCTTCTAGACCAGGCATCGGTGACCAGGGAAGAGTGGTGTCTGAGCTAGGGA ATGGCATTGCTGCCTTTGAGTCGGTACCCACCGCCATCTACTGCTTCCTACGCTGCATGGAGCCAGACCCTGAGA TCCCTTCTGCCTTCAATAGCCTCCAAAGGACTCTCATTTATTCCATCTCACTTGGTGGGGACACAGACACCATTG AAGGCTACGAGGAGACAGACATCCTGGCCCAAAGCCTGCACCGTGTCTTCCAGAAGAGT<u>TGA</u>TGAGGGCTACAGC TGTTGGGGCTCTGCCAGGTCCCCTGGGACCAACTACAGCTCCAATCAGAAACCCTGCGCTTCCTTGAGTGTGGCT TCCCACTTTTCCTGCATTGTGGAGCTGACTGAGTACACCGGTGAGGCTGGGGTCTCTGCAGGGGAGGTCACTGGA ACAGCGAGCAAGGGACTGGTGCCTGGTGCTGGGTCTCTGGTTTGCTGCAGAGCCGTAGGACACTCCTGGCT CCTCAGTAGGACAGACGCAGGCGGGTTTATTTTGGAGGGGTACTTGTGGCATTTTCCTGTATTGTCTTGGA ${\tt CATGGGATGTGGGGAGGTGGAAATGATGAGCAGTAGCATCATTTCTCCCTGTTGGGTTTTAGCCAGTTTGCCAGC}$ AAGCGCATCCTAGCAGGGTCCCCGAGCAGCAGGTTGTGTGGATGAAGGGACAGGCACTTGCATCCAGCTGATCTA GGTCACACCTGGCTCTTGGCTGCCATGTGGCTTATTAACAGCTTCCAGTGGAAGTCGCAATAAACAGTTTTTGGT

MAAAAMAAAAGGGAGAARSLSRFRGCLAGALLGDCVGSFYEAHDTVDLTSVLRHVQSLEPDPGTPGSERTEALYY
TDDTAMARALVQSLLAKEAFDEVDMAHRFAQEYKKDPDRGYGAGVVTVFKKLLNPKCRDVFEPARAQFNGKGSYG
NGGAMRVAGISLAYSSVQDVQKFARLSAQLTHASSLGYNGAILQALAVHLALQGESSSEHFLKQLLGHMEDLEGD
AQSVLDARELGMEERPYSSRLKKIGELLDQASVTREEVVSELGNGIAAFESVPTAIYCFLRCMEPDPEIPSAFNS
LQRTLIYSISLGGDTDTIATMAGAIAGAYYGMDQVPESWQQSCEGYEETDILAQSLHRVFQKS

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 $\tt CCGTGGCTAGGCGAGTGGGGCGGCGGCGCCCCACC\underline{ATG}TCGAGGCGAGCGAACCGTGGCACCGAGAGCAAGAAA$ ATGAGCTCTGAGCTCTTCACCCTGACCTATGGTGCCCTGGTCACCCAGCTATGTAAGGACTATGAAAATGATGAA GATGTGAATAAACAGCTGGACAAAATGGGCTTTAACATTGGAGTCCGGCTGATTGAAGATTTCTTGGCTCGGTCA ${\tt AATGTTGGGAGGTGCCATGACTTCGGGAAACTGCGGATGTCATTGCCAAGGTGGCGTTCAAGATGTACTTGGGC}$ ATCACTCCAAGCATTACTAATTGGAGCCCAGCTGGTGATGAATTCTCCCCTCATTTTGGAAAATAACCCCTTGGTG GACTITGTGGAACTTCCTGATAACCACTCATCCCTTATTTATTCCAATCTCTTGTGTGGGGGTGTTGCGGGGAGCT TTGGAGATGGTCCAGATGGCTGTGGAGGCCAAGTTTGTCCAGGACACCCTGAAAGGAGACGGTGTGACAGAAATC AGCCATCAGGAGCACTGTTGGAATCAGCAGGCCTCTGTGCTCCTCTGCCCTCCAGAACTCAGTGACTCTTGAAC ATGGATGTTATATATTCTTATAACCTGTTTCCATTCTCCATTCAAATAAAGAGCAGACTGCGATATAGTCCATTT ${\tt ACCCCATGTGTGCACATTCAGGAGCGACAGTCTCTGCCCCCATTCCCTTGAGAGGGGCTGGATGTAATCACCTTT} \ \ ,$ GGTTGGACTAGAAAGAGCTCAAACCATTTTACATTCCTGTTTGAATTTTCCAAAGCAAAACTCACTTTGACCCCA TTAAGAGGCAAGCCTGGCACATCTATCCCTGGGCCTTTAGAAAGCCATTTGCCTCAAATGGCTATAGGGTTGTGG GGTGGAGGGAGGGAGGGAGGGAGTGGGGAGGAATTGCTAGCTGTAGTGTAACACATTGTAGTGTTTGCCA GGAAAGGAGCCAGTCATGCCGGAAACACTGACTTCTGGGAAGCCACCCAGGTCTCATTCCTCCCTGCTGTTGGAG GCAACATCTCCTCTTTTTACAGAGGGTACATCCTTTTTTCTTACAAATTCTTCAATAAAGACACATTCTTGAGTG AAATCCCTAAAAAAAAA

 ${\tt MSRQANRGTESKKMSSELFTLTYGALVTQLCKDYENDEDVNKQLDKMGFNIGVRLIEDFLARSNVGRCHDFRETA}\\ {\tt DVIAKVAFKMYLGITPSITNWSPAGDEFSLILENNPLVDFVELPDNHSSLIYSNLLCGVLRGALEMVQMAVEAKF}\\ {\tt VQDTLKGDGVTEIRMRFIRRIEDNLPAGEE}$

179/6881 FIGURE 169A

ACTTACTATTGGAGGCAGTGGGCAGCGCAGGACAGGCCCAGGGCCGACCCTGGCAATGACTGTCACCAGCTG AGGAAGTGGGATTTCTGGAAATAATGCAAAGAGAGCTGGACCATTCATCCTTGGTCCCCGTCTGGGCAACTCACC GGTGCCAAGCATAGTGCAGTGTTTGGCGAGGAAAGATGGCACGGATGACTTCTATCAGCTGAAGATCCTGACCCT GGAGGAGAGGGGGACCAAGGCATAGAGAGCCAGGAAGAGCGGCAAGATGCTGCTGCACACCGAGTACTC ACTGCTGTCTCCTGCACACGCAGGATGGCGTGGTGCACCACCACGGCCTCTTCCAGGACCGCACCTGTGAAAT CGTTGAGGACACAGAATCCAGCCGGATGGTTAAGAAGATGAAGAAGCGCATCTGCCTCGTCCTGGACTGCCTCTG TGCTCATGACTTCAGCGATAAGACCGCTGACCTCATCAACCTGCAGCACTACGTCATCAAGGAGAAGAGGCTCAG CGAGAGGGAGACTGTGGTAATCTTCTACGACGTGGTCCGCGTGGTGGAGGCCCTGCACCAGAAAAATATCGTGCA CAGAGACCTGAAGCTGGGGAACATGGTGCTCAACAAGAGGACACATCGGATAACCATCACCAACTTCTGCCTCGG GAAGCATCTGGTGAGCGAGGGGGACCTGCTGAAGGACCAGAGAGGGGGCCCTGCCTACATCAGTCCCGACGTGCT CAGCGGCCGGCCGTACCGTGGCAAGCCCAGTGACATGTGGGCCCTGGGCGTGGTGCTCTTCACCATGCTGTATGG CCAGTTCCCCTTCTACGACAGCATCCCGCAGGAGCTCTTCCGCAAGATCAAGGCTGCCGAGTATACCATTCCTGA GGATGGACGGGTTTCTGAGAACACCGTGTGTCTCATCCGGAAGCTGCTGGTCCTTGACCCCCAGCAGCGCCTGGC CGCCGCCGACGTCCTGGAGGCCCTCAGTGCCATCATTGCATCATGGCAGTCCCTGTCATCTCTGAGTGGGCCTTT GCAAGTGGTTCCTGACATTGATGACCAAATGAGCAATGCGGATAGCTCCCAGGAGGTGAGTTGGGGAGGGCAGAT GCCACAGAGTTTCCTTGGTCTTCTCCCCAGCCTTGGGGTGGGAAAGGGAGACTTCAGTCCTCAGCCTGAGCTGC CTGGGGCCTGGCTTGGTGTAGCTGGAGATCTTTGGCCAGAGAGACCTGTGAGACAGCCGAGCTGGAGCC AGTGCCCAAGTGGCCCAGGCCAGCCCTCTCAGCTTCCTCCTGCCCAAGTCACATTTCTCTGCCCCCTGACTC CTGCACTGGAGAAAGTGTTGGGCCTAGGGTGGGGGCAGAGACTTGGGCACCAGGCAGCAGAGGCAGGTGATCTT AGGGTGCCCCTGGAGGGCAGGGCTTGGCCGAGCAACAGCATTGCTGGGCCCTGGATATTGGAAGGACCTTCCCT CCCTGGCCCACCTTGGAGCTCCACAGTGAGCAGTGTGCAGGTAGGACCAGGAGGGGCCGTGCCTGGGAGAGCCTC CCAGAGCCTCCTGGCCCCCGAGGAAAGAGTTCCAATCCCTACCCACCTCCAGCTTCCACCCTTTAGCTGTTTG GCTAAAATCATCACTAGCCCGCAGTGAGTGCCTACCCCGAGGGCACCTCATTCAGCCCTCACTGCGGGCCTG CGTGGCCTGTGTTCTTAGCCCCATGTTACAGAAGAGGGAAACAGGGTTAGAGAGGACTTTCCCAAAGCCACACAGC TTAGAAGTAGTGGAGCTAAGCCTTGAACCCAAGTCTCATCCGGAAGCCCTGCTGTCTCCTGTGGTGACTGGCACG GGGACACCACTTCAGCTTCTGTTACCATCTGCCTAGACCATCCCAGGGAGCTCAGCATGGGGCCCTGCGTATGTG GCTCCTCCAGGTGCTGCGCCCCAGCCCAGGCTTGCTCGTACCTCTTGACGTGCATTAGCCGCCTCAGGGCTCA GAGAACCTTTGCGAGGGCCAGACAGCTAAGGCTTCTGAGGTAAAGTGACCTCTCACGCAGCCAGTGAGTTAGGA AGCATGAGTCTGCGTCAGGTCCGGGGCGGCGGCCTGCAAGGGGAGTTGAGGTTGGCTGGAGGGGGTCAGG GACCCACCCTCAGCGCCACCCCCCCGGCCTTGAGGCCTGAGGGTGTGCCTGGAAGGGTGACTGCAGGA GCCAGGCTGCCAGCACTCTTGCCTGCCTCCTGTCTGCTGCGCTGCCTTCATCTGGGTTTATCTTTGTCTCCTTC CCACCCTCCCGCCTCAAAGGCGAAGGTGACGGAGGAGTGCTCCCAGTACGAGTTTGAGAACTACATGCGTCAGC AGCTGCTGGCCGAGGAGAAGAGCTCCATCCATGACGCCCGGAGCTGGGTACCCAAGCGGCAGTTCGGCAGCG CACCACCGGTGCGACGGCTGGGCCACGACGCCCATGACCTCCTTGGACACGGCCATCCTGGCGCAGCGCT ACCTGCGGAAATAACAGCCTCAGCCGGGGCCACCAGCAGCCACCTGCTGCCACTTCTTCCAGCCCCAGCCAAAGGCGTGG CTGTCAGGGCTGGGCCCTGTAGTGCTGGACTCTCCCGGGCCACAATAGGGACAGGGCAGGGACAGGGACAGCCCA GGTCACACGTGGGGTCAGCAGAGGTACCACGAAGCTACCTTTTGGGATGATTGCTCGATTGTTTGAGTTTTTAAAT CTGAGAAGCCTAGATAACTAATCTGCTTTTAATCACGATGTTTTAATCTACCTCTGTCTCTTTAACCATGCTGTC TCTGGACTGAGCAAGAGGGAGGGGGGGCCTGCTCACCCCACTCCAGGGCCTTCCCCAGCGGCCACCAACTGACC TCCCTGCTCTCCCAGGCCCCTGCCACAGCCTCTTTCCGTCCCTCTTTCTGATCCAGGCCCCTCAGTCCAAGCT AGCTCCTCCTCACCCCAGGCAGGGAAGCCCCTCCTGCCAGTCCCTGTCCCCTTTCAGCCCACCAGTCCCTCTC TGCTGCCGGTGATGGGAGGCCTTTCTAGACCTGGCTCTTTCTCTCCCGTCTCAGTGGCTTCTCTGAGGTGCTGTA

180/6881 FIGURE 169B

CACGCGCGTTAACCTGTTCCCTTCTCTATCCTTCCCCGTGGTACTGAGCTCACGTGGACTCCCAGTGCGAAGGGG GGGATGGTGGGAACATATCCCAGTGCCCTTGCCTCATAATAGATGTGGTGACTCTCCCGGTAGACCCTAGCAAGG CTGCTGCCCTTTTGAGCCGAGATTTTGAAGTGGATGCCCGTCTTGCCAGAAATGCTGTTCTCACCAGAATGCCCC CTCCCCTTGCCCTTACTGGACTTGGCCCTGCCTGATGCCAAGCAAAGACCCTTCCCCAGAGGCCTACCCCCATA CTTGGGCAAGTTCCCAAACCTCCTTGTGCCTCAGTTTCCCCATCTGGAAAAAATGGGGCCACCTCTTGCCAGCAG TAGCAGGGCTGCCCACGCCCCTTTCTCCCCATGCCCCATCCAGCACTTGGGCGACTCATGCCTCTGCCTCAGTGG GCGGGAGCGGAAATGCAGTCCGGCCTAGGGCTCCCAGCCCTTGACTGTCCTCCTGTGAGGGCCTGAAGCTGGGCC ATGTGTCTGATGACATTCCTGGTGAAGCAAAGGAGGAGGAGGATGGGTCAGCCCTCACTGGGTGTCACACACTGAG AGAAGTCCTATTGTAAAGAAACGGAAAAAGTCACAAAAAAGTTTGTATAAAGACATATTTTTGTACTACATGGGG ACTCTTCCTGCATGTCAGCAATAAAACTTCCTGATCTGG

181/6881 FIGURE 170

MKRRASDRGAGETSARAKALGSGISGNNAKRAGPFILGPRLGNSPVPSIVQCLARKDGTDDFYQLKILTLEERGD QGIESQEERQGKMLLHTEYSLLSLLHTQDGVVHHHGLFQDRTCEIVEDTESSRMVKKMKKRICLVLDCLCAHDFS DKTADLINLQHYVIKEKRLSERETVVIFYDVVRVVEALHQKNIVHRDLKLGNMVLNKRTHRITITNFCLGKHLVS EGDLLKDQRGSPAYISPDVLSGRPYRGKPSDMWALGVVLFTMLYGQFPFYDSIPQELFRKIKAAEYTIPEDGRVS ENTVCLIRKLLVLDPQQRLAAADVLEALSAIIASWQSLSSLSGPLQVVPDIDDQMSNADSSQEVSWGGQMGHYPA PRDRLLGAGRARAEVAATRRPQSFLGLLPQPWGGKGRLQSSA

ATTGGGACGCTGCGCCTGGCCTCAGGCCACTGGCTACCGAACCCCGGGGCTCTTCACCAGTCCAGCTCGTTTC ACGGCTGCGGGCCCAGAACATCCCGGGAGACAAGGCCCGCAAAGTTCTGAATGACATCATCTCCACCATGTTCAA TAGAAAGTTTATGGAGGAATTATTCAAGCCTCAAGAGCTCTACTCCAAGAAGGCCCTGAGGACTGTCTATGAGCG CCTGGCTCATGCCTCCATTATGAAACTGAACCAGGCCAGCATGGATAAGCTCTATGACCTGATGACCATGGCTTT ${\tt CANATATCAAGTATTGCTGTTGCCCGACCCAAGGATGTGCTGCTGGTCACTTTCAATCACTTGGATACCATCAA}$ GGGATTCATCCGAGACTCCCCAACCATCCTGCAGCAAGTGGACGAGACTTTGCGGCAGCTGACAGAAATATATGG TGGTCTCTCTGCAGGGGAGTTCCAGCTGATCCGGCAGACACTCCTCATCTTCTTCCAAGACCTGCACATCCGAGT ATCCATGTTTCTAAAGGACAAAGTTCAGAATAATAACGGTCGCTTTGTGTTGCCGGTGTCCGGGCCTGTTCCTTG GGGAACTGAAGTTCCAGGACTCATCAGAATGTTCAACAACAAAGGTGAAGAAGTGAAGAGGATAGAATTCAAGCA TGGTGGAAACTATGTCCCTGCACCCAAAGAAGGTTCTTTTGAACTTTATGGAGACCGAGTCCTGAAACTGGGAAC TAACATGTACAGCGTGAATCAGCCTGTGGAAACTCATGTGTCTGGATCATCAAAGAACTTAGCCTCATGGACCCA TAAGAAACCCAGTGGCCCTGAGCCCAGATTCCGGTTGAATCTCTTTACCACCGATGAAGAAGAAGAACAAGCAGC GCTAACCAGGCCAGAAGAGTTATCCTATGAAGTTATCAACATACAAGCCACCCAGTCTCTTTTCAGCAATCTGGC $\texttt{CACCATTCAGGGGGGCCTGACTGGG} \underline{\textbf{TGA}} \\ \texttt{CAGGATGAATGGGAAGGTTCTGACCTGTTTTGAGTCCGGCTCCCACCT}$ TGCTGTCACATATCAGAATGTCACTGCTCTGAGTGTGTCCCAGGGCCTTGGAGGTGGCCGTGAGGTGCCGAGAA GCAGCCGCAGCCTCCCCCCCCCCCACCTATCCCAGAGCGATGCTGGTGATTTCAAACGTATCTGTCCTATCAGTAAA TAAACAAGATGCAGATCTCTGGT

183/6881 FIGURE 172

MSVRTLPLLFLNLGGEMLYILDQRLRAQNIPGDKARKVLNDIISTMFNRKFMEELFKPQELYSKKALRTVYERLA HASIMKLNQASMDKLYDLMTMAFKYQVLLCPRPKDVLLVTFNHLDTIKGFIRDSPTILQQVDETLRQLTEIYGGL SAGEFQLIRQTLLIFFQDLHIRVSMFLKDKVQNNNGRFVLPVSGPVPWGTEVPGLIRMFNNKGEEVKRIEFKHGG NYVPAPKEGSFELYGDRVLKLGTNMYSVNQPVETHVSGSSKNLASWTQESIAPNPLAKEELNFLARLMGGMEIKK PSGPEPGFRLNLFTTDEEEEQAALTRPEELSYEVINIQATQSLFSNLATIQGGLTG

GAAGCTGGACTGCAGCTGGTTTCAGGAACTTCTCTTGACGAGAAGAGAGACCAAGGAGGCCAAGCAGGGGCTGGG ${\tt TGAACATCAAGTTGGTGCT} \underline{{\tt ATG}} {\tt GCAAGGCTGGGAAACTGCAGCCTGACTTGGGCTGCCCTGATCATCCTGCTGCT}$ CCCCGGAAGTCTGGAGGAGTGCGGGCACATCAGTGTCTCAGCCCCCATCGTCCACCTGGGGGATCCCATCACAGC CTCCTGCATCATCAAGCAGAACTGCAGCCATCTGGACCCGGAGCCACAGATTCTGTGGAGACTGGGAGCAGAGCT TCAGCCCGGGGGCAGCAGCGTCTGTCTGATGGGACCCAGGAATCTATCATCACCCTGCCCCACCTCAACCA CACTCAGGCCTTTCTCCCTGCTGCCTGAACTGGGGCAACAGCCTGCAGATCCTGGACCAGGTTGAGCTGCGCGC GGAGCCAGGACCTGAGACCCACCTACCCACCAGCTTCACTCTGAAGAGTTTCAAGAGCCGGGGCAACTGTCAGAC CCAAGGGGACTCCATCCTGGACTGCGTGCCCAAGGACGGGCAGAGCCACTGCTGCATCCCACGCAAACACCTGCT GTTGTACCAGAATATGGGCATCTGGGTGCAGGCAGAGAATGCGCTGGGGACCAGCATGTCCCCACAACTGTGTCT TGATCCCATGGATGTTGTGAAACTGGAGCCCCCATGCTGCGGACCATGGACCCCAGCCCTGAAGCGGCCCCTCC CCAGGCAGGCTGCCTACAGCTGTGCTGGGAGCCATGGCAGCCTGCACATAAATCAGAAGTGTGAGCTGCG CCACAAGCCGCAGCGTGGAGAAGCCAGCTGGGCCACTGGTGGGCCCCTCCCCTTGGAGGCCCTTCAGTATGAGCT CGACTGGAGCCCAGCCTGGAGCTGAGAACTACCGAACGGGCCCCCACTGTCAGACTGGACACATGGTGGCGGCA CTGCACCTTCCACCTGCCTTCAGAAGCCCAGGAGGTGGCCCTTGTGGCCTATAACTCAGCCGGGACCTCTCGCCC CACCCCGGTGGTCTTCTCAGAAAGCAGAGGCCCAGCTCTGACCAGACTCCATGCCATGGCCCGAGACCCTCACAG CCTCTGGGTAGGCTGGGAGCCCCCAATCCATGGCCTCAGGGCTATGTGATTGAGTGGGGCCTGGGCCCCCCAG CGCGAGCAATAGCAACAAGACCTGGAGGATGGAACAGAATGGGAGAGCCACGGGGTTTCTGCTGAAGGAGAACAT CAGGCCCTTTCAGCTCTATGAGATCATCGTGACTCCCTTGTACCAGGACACCATGGGACCCTCCCAGCATGTCTA TGCCTACTCTCAAGAAATGGCTCCCTCCCATGCCCCAGAGCTGCATCTAAAGCACATTGGCAAGACCTGGGCACA GCTGGAGTGGGTGCCTGAGCCCCTGAGCTGGGGAAGAGCCCCCTTACCCACTACACCATCTTCTGGACCAACGC TCAGAACCAGTCCTTCTCCGCCATCCTGAATGCCTCCTCCCGTGGCTTTGTCCTCCATGGCCTGGAGCCCGCCAG TCTGTATCACATCCACCTCATGGCTGCCAGCCAGGCTGGGGCCACCAACAGTACAGTCCTCACCCTGATGACCTT GACCCCAGAGGGGTCGGAGCTACACATCATCCTGGGCCTGTTCGGCCTCCTGCTGTTGCTCACCTGCCTCTGTGG AACTGCCTGGCTCTGTTGCAGCCCCAACAGGAAGAATCCCCTCTGGCCAAGTGTCCCAGACCCAGCTCACAGCAG CCTGGGCTCCTGGGTGCCCACAATCATGGAGGAGGATGCCTTCCAGCTGCCCGGCCTTGGCACGCCACCCATCAC CAAGCTCACAGTGCTGGAGGAGGATGAAAAGAAGCCGGTGCCCTGGGAGTCCCATAACAGCTCAGAGACCTGTGG CCTCCCCACTCTGGTCCAGACCTATGTGCTCCAGGGGGACCCAAGAGCAGTTTCCACCCAGCCCCAATCCCAGTC TGGCACCAGCGATCAGGTCCTTTATGGGCAGCTGCTGGGCAGCCCCACAAGCCCAGGGCCAGGGCACTATCTCCG CTGTGACTCCACTCAGCCCCTCTTGGCGGGCCTCACCCCCAGCCCCAAGTCCTATGAGAACCTCTGGTTCCAGGC CAGCCCTTGGGGACCCTGGTAACCCCAGCCCCAAGCCAGGAGGACGACTGTGTCTTTGGGCCACTGCTCAACTT CCAGCCCAGGCTCTCACCATCTCCAGTCACCAGCATCTCCCTCTCCCCAATCTCCATAGGCTGGGCCTCCCAG **AACTTCAGTATTGTAAAC**

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MARLGNCSLTWAALIILLLPGSLEECGHISVSAPIVHLGDPITASCIIKQNCSHLDPEPQILWRLGAELQPGGRQ
QRLSDGTQESIITLPHLNHTQAFLSCCLNWGNSLQILDQVELRAGYPPAIPHNLSCLMNLTTSSLICQWEPGPET
HLPTSFTLKSFKSRGNCQTQGDSILDCVPKDGQSHCCIPRKHLLLYQNMGIWVQAENALGTSMSPQLCLDPMDVV
KLEPPMLRTMDPSPEAAPPQAGCLQLCWEPWQPGLHINQKCELRHKPQRGEASWALVGPLPLEALQYELCGLLPA
TAYTLQIRCIRWPLPGHWSDWSPSLELRTTERAPTVRLDTWWRQRQLDPRTVQLFWKPVPLEEDSGRIQGYVVSW
RPSGQAGAILPLCNTTELSCTFHLPSEAQEVALVAYNSAGTSRPTPVVFSESRGPALTRLHAMARDPHSLWVGWE
PPNPWPQGYVIEWGLGPPSASNSNKTWRMEQNGRATGFLLKENIRPFQLYEIIVTPLYQDTMGPSQHVYAYSQEM
APSHAPELHLKHIGKTWAQLEWVPEPPELGKSPLTHYTIFWTNAQNQSFSAILNASSRGFVLHGLEPASLYHIHL
MAASQAGATNSTVLTLMTLTPEGSELHIILGLFGLLLLLTCLCGTAWLCCSPNRKNPLWPSVPDPAHSSLGSWVP
TIMEEDAFQLPGLGTPPITKLTVLEEDEKKPVPWESHNSSETCGLPTLVQTYVLQGDPRAVSTQPQSQSGTSDQV
LYGQLLGSPTSPGPGHYLRCDSTQPLLAGLTPSPKSYENLWFQASPLGTLVTPAPSQEDDCVFGPLLNFPLLQGI

GGGTCGCGGGAGATTGCTGGGCGGTTCTTGCCGGAAGCGGAGAGCGGCTGATCGCAGTCCGGAGGTGAGGCGGA ACTCTGAGGCAGATATCCTCCCTTTCCTCCTCGGCTGCTCTTACTTTGACAAGCCAGGCTAACATTGAAGGT GGTCCATTATGGCTGACATGCAAAATCTGGTAGAAAGATTGGAGAGGCCAGTGGGCCGCCTGGAGGCAGTATCTC ATACCTCTGACATGCACCGTGGGTATGCAGACAGTCCTTCAAAAGCAGGAGCAGCTCCATATGTGCAGGCATTTG ACTCGCTGCTTGCTGGTCCTGTGGCAGAGTACTTGAAGATCAGTAAAGAGATTGGGGGGAGACGTGCAGAAACATG AAAATAAGCTTTCCGATTTGTTGGCACCCATCTCAGAGCAGATCAAAGAAGTGATAACCTTTCGGGAGAAGAACC GAGGCAGCAAGTTGTTTAATCACCTGTCAGCTGTCAGCGAAAGTATCCAGGCCCTGGGCTGGGTGGCTATGGCTC CCAAGCCTGGCCCTTATGTGAAAGAATGAATGATGCCGCCATGTTTTATACAAACCGAGTCCTCAAAGAGTACA AAGATGTGGATAAGAAGCATGTAGACTGGGTCAAAGCTTATTTAAGTATATGGACAGAGCTGCAGGCTTACATTA AGGAGTTCCATACCACCGGACTGGCCTGGAGCAAAACCGGGGCCTGTGGCAAAAGAACTGAGCGGACTGCCATCTG GACCCTCTGCCGGATCATGTCCTCCTCCCCCTCCACCATGCCCCCCTCCTCCCCCAGTCTCTACCATTTCATGCT CATATGAGTCTGCTCCCGCTCATCACTGTTCGCGCAGATTAATCAGGGGGAGAGCATTACACATGCCCTGAAAC ATGTATCTGATGACATGAAGACCTCACAAGAACCCTGCCCTGAAGGCTCAGAGTGGTCCAGTACGCAGTGGCCCCA AACCATTCTCTGCACCTAAACCCCAAACCAGCCCATCCCCCAAACGAGCCACAAAGAAGGAGCCAGCTGTACTTG AACTGGAGGCAAGAGTGGAGAGTGGAAAATCAGGAAAATGTTTCCAACCTGGTGATTGAGGACACAGAGCTGA AACAGGTGGCTTACATATACAAGTGTGTCAACACGACATTGCAAATCAAGGGCCAAAATTAACTCCATTACAGTAG ATAACTGTAAGAAACTTGGCCTGGTATTCGATGACGTGGTGGCGCATTGTGGAGATAATCAACAGTAAGGATGTCA AAGTTCAGGTAATGGGTAAAGTGCCAACCATATCCATCAACAAAACAGATGGCTGCCATGCTTACCTGAGCAAGA ATTCCCTGGATTGTGAAATAGTCAGTGCCAAATCTTCCGAGATGAATGTCCTCATTCCTACAGAAGGCGGTGACT TTAATGAATTCCCAGTTCCTGAGCAGTTCAAGACCCTATGGAACGGGCAGAAGTTGGTCACCACAGTGACAGAAA TCTTTCTAGATTTCCTCTACCTTTTTGCTCTTAAAACTGCTTCTCTGCTCTGAGAAGCACAGCTACCTGCCTTC ACTGAAATATACCTCAGGCTGAAATTTGGGGTGGGATAGCAGGTCAGTTGATCTTCTGCAGGAAGGTGCAGCTTT TCCATATCAGCTCAACCACGCCGCCAGTCCATTCTTAAGGAACTGCCGACTAGGACTGATGATGCATTTTAGCTT TGTTCACACTGGTTAATCTTTTTTTAACAATGAGCATGAAGGTAGCAGAAGCTGGTGTTTTCCAGATGGTTCTT CTAACCAAACTAATTTTCACTGTTGACAAGCGAGGCAAGGGTTGCACTGGACCAAAGGCTGAGGCTTGGCCATC TAGCATTCCATACAAAATTGTTTCCTATAAGCATTCCTTTTATTCTCTATTCTATCCTGGGTCTGCCTCAACCGT GAGATAGGAGAGTCTCTGGTACTAGCTGCTGTAGCAGTGCCCTTCATCCAGGGCAGTTAATGGAGTCTTGGACCC CCACATGATTTCAAGGAGTCTGGCATTCCTGAATCCTTCTTCCCTGCCAGGTGCCTGTCACCTGTCTTCACTGCC AGGCTGGTTTTAGGTCTTGAATTATGTAAGAATCTTGCACAGCACTGCTAATGTAAATTTCAGTTGTTTTTCCCT CTAGGACAAACACTTACCAAAATATGCAACTTTTTTTTGGTGGGAAGAGAGTTGTCCTGTGATTTCTACCCATT TCCTGAGGCCTGTGGAAATAAACCTTTATGTACTTAAAGTTATACAGAAAATAGAATAAAGTTAATACCAAACTT G

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CTCTCCTGCCATGGACCTGCGCTTCTCGGGCGCTGCAGCATCTGGACCCGCCGGCGCCGCTGCCGTTGGTGATCT GGCATGGGATGGGAGACAGCTGTTGCAATCCCTTAAGCATGGGTGCTATTAAAAAAATGGTGGAGAAGAAAATAC CTGGAATTTACGTCTTATCTTTAGAGATTGGGAAGACCCTGATGGAGGACGTGGAGAACAGCTTCTTCTTGAATG TCAATTCCCAAGTAACAACAGTGTGTCAGGCACTTGCTAAGGATCCTAAATTGCAGCAAGGCTACAATGCTATGG GATTCTCCCAGGGAGGCCAATTTCTGAGGGCAGTGGCTCAGAGATGCCCTTCACCTCCCATGATCAATCTGATCT CGGTTGGGGGACAACATCAAGGTGTTTTTGGACTCCCTCGATGCCCAGGAGAGAGCTCTCACATCTGTGACTTCA TCCGAAAAACACTGAATGCTGGGGCGTACTCCAAAGTTGTTCAGGAACGCCTCGTGCAAGCCGAATACTGGCATG ACCCCATAAAGGAGGATGTGTATCGCAACCACAGCATCTTCTTGGCAGATATAAATCAGGAGCGGGGTATCAATG AGTCCTACAAGAAAAACCTGATGGCCCTGAAGAAGTTTGTGATGGTGAAATTCCTCAATGATTCCATTGTGGACC CTGTAGATTCGGAGTGGTTTGGATTTTACAGAAGTGGCCAAGCCAAGGAAACCATTCCCTTACAGGAGACCTCCC TGTACACACAGGACCGCCTGGGGCTAAAGGAAATGGACAATGCAGGACAGCTAGTGTTTCTGGCTACAGAAGGGG ACCATCTTCAGTTGTCTGAAGAATGGTTTTATGCCCACATCATACCATTCCTTGGA<u>TGA</u>AACCCGTATAGTTCAC AATAGAGCTCAGGGAGCCCCTAACTCTTCCAAACCACATGGGAGACAGTTTCCTTCATGCCCAAGCCTGAGCTCA GATCCAGCTTGCAACTAATCCTTCTATCATCTAACATGCCCTACTTGGAAAGATCTAAGATCTGAATCTTATCCT TTGCCATCTTCTGTTACCATATGGTGTTGAATGCAAGTTTAATTACCATGGAGATTGTTTTACAAACTTTTGATG TGGTCAAGTTCAGTTTTAGAAAAGGGAGTCTGTTCCAGATCAGTGCCAGAACTGTGCCCAGGCCCAAAGGAGACA ACTAACTAAAGTAGTGAGATAGATTCTAAGGGCAAACATTTTTCCAAGTCTTGCCATATTTCAAGCAAAGAGGTG CTATTTCTGCATCATTTCTTAAGGCTGCCTTCCTCTCTCAGTACGTTGCCCTCTGTGCTATCATCATCAA TTATTAGACAAATCCCACTGGCCTACAGTCTTGCTTCTGCAGCACCCACTTTGTCTCCTCAGGTAGTGAATT AGTTGCTGTCACAAAAGGAGGGAAGTAGCACCCAAATTAAGTTGCTTAAGAGAGGAAATGTACATCTTGTATAAC TTAGGGAGCGAAGAAAATGTAGGCGCGAAAGTGAAAAGTGAGGCAGCTAGTTCTTCCTATTCCATTCTCGACCAA CCTGCCCTTTCTTAATATGACTAGTGGTCTTGATGCTAGAGTCAACTTACTCTGTTGCTGGCTTTAGCAGAGAAT AGGAGGAACCATATGAAAAAGATCAGGCTTTCTGACTTCCATCCCCAAAACACATTTACCAGCATACTCCAAACT GTTTCTGATGTGTTCCATGAGAAAAGGATTGTTTGCTCAAAAAGCTTGGAAAATACTACACACTCCCTTTCTCCT TCTGGAGATCAACCCACATTAGAGTGTCTAAGGACTCCTGAGAATTCCTGTTACAGTAAACAAAACTAACGTAAT CTACCATTTCCTACACTATTTGAGCATGGAAATCATAGTCCCCACTCTGTGAAAACTTAACGCTTTTTGGAAGAC ATTTCTGTAGCATGTCAGTTTGGAGAAATGATGAGCTACGCCTTGATGAAAGAACCGTGTTGGTGCTGCTAAGTT TAGCCATTATGGTTTTTCCTTTCTCTCTTTAAGCCTTATTCTTCAACTAAAAGATGAGGATTAAGAGCAAGAAG TTGGGGGGGATGTGAAAATAATTTTATGAGGTTGTCTAAAAT

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MASPGCLWLLAVALLPWTCASRALQHLDPPAPLPLVIWHGMGDSCCNPLSMGAIKKMVEKKIPGIYVLSLEIGKT LMEDVENSFFLNVNSQVTTVCQALAKDPKLQQGYNAMGFSQGGQFLRAVAQRCPSPPMINLISVGGQHQGVFGLP RCPGESSHICDFIRKTLNAGAYSKVVQERLVQAEYWHDPIKEDVYRNHSIFLADINQERGINESYKKNLMALKKF VMVKFLNDSIVDPVDSEWFGFYRSGQAKETIPLQETSLYTQDRLGLKEMDNAGQLVFLATEGDHLQLSEEWFYAH IIPFLG

189/6881 FIGURE 178

 ${\tt MINTKGKRRGTRYMFSRPFRKHGVVPLAMYMRIYKKGDIVDIKGMGTVQKGMSHKCYHGKTGRVYNVPQHAVGIV} \\ {\tt VNKQVKGKILAKRINVCIEHIKHSKSRDSFLKRVKENDPPPREAQCVRTNGKEPELLETIPYEFMA}$

191/6881 FIGURE 180A

CCCCGTGAGCCTCCCTCGCCGCCCCCCCCCCCCCCCTGCCTATCCACTCGGAGTCCGCGCCAGCCTGGGGCCG GGCCGCGCCTACTGCCGGGTTCGCGGGGCGGGGTCCCGGGGCAGCACCTGCCCCGCCTTGCGGAGCCGCCTCGGC CTGTGGAGGCCCCTCCCTGTCTGGACCCCGGCCCCACCTCCGGACCCTTTTATCACATCGCCTCCTCTGGGAGC CTGCCCTGATTGCCTTCACCTCATTTCTTGAAAATTGGTGTTTTTGGCAGAAGTCAATTGAAGCCTTGTGCAAATG CCCTAGGGGTGTGCTGTTGGGAGGCCCCCTGTGATGCGGAACACCAGGCTCAGATTCATCAGTTCGAGCTGC $\tt CTGAGGCCCTGCCACCCGGGGACC\underline{ATG} TTAACGGGGAGCCAGGTCCTGCCTCATCTGGGGCCTCCAGGAATGT$ GGTGCGGAGCTCCAGCATTGGCGGTGAAATCTGCGGATCCCAGCAAGCCGGGGGCGGGGCTGGGACCACCACCGC CAAGAAGCGGCGGAGCAGCCTGGGTGCCAAGATGGTGGCCATCGTGGGCCTGACTCAGTGGAGCAAGAGCACACT CCAGCTTCCGCAGCCTGAAGGGGCCACCAAGAAGCTGCGCAGCAACATCCGCCGGAGCACGGAGACATCGC GGTGGAGATGCGGAGCCGGGTCACACGCCAGGCAGCCGGGAGTCCACCGATGGGAGCACCAACAGCAACAGCTC CGACGCACGTTCATCTTCCCCACTACCGGCTAGGGGCTGAAAGCCAGTTCAGCGATTTCCTGGATGGGCTGGG ACCAGCTCAGATTGTGGGGCGACAGACACTGGCAACACCACCCATGGGAGATGTGCACATTGCCATCATGGACCG CACCTATATCAAGGTTTACCTGCTGGAGAATGGGGCCTGCTTGGCCAAGAAGAAGACAAAGATGACCAAGAAGAC CTGTGATCCCCTGTACCAGCAGGCTCTGCTCTTTGACGAGGGGACCCCAGGGCAAGGTGCTGCAGGTGATCGTCTG GGGAGACTATGGCCGCATGGACCACAAGTGCTTCATGGGCCATGGCCCAGATCATGCTGGACGAGCTGGACCTCAG CGCCGCGGTCACCGGCTGGTACAAACTCTTCCCCACCTCCTCAGTGGCAGACTCCACACTCGGATCCCTCACCAG GCGCCTGTCCCAGTCTTCCCTGGAGAGTGCCACCAGCCCCTCATGCTCT<u>TAA</u>GGATGTCAGGAAGAGGCCAGGAT GGTGGTGTGGGGAGGGGTGCCTGCTGGCCCCATGTCCTCCCCTGTACATAGTCTTCGTGTCTTTCTGGACCCCTT GTCCTGCTGCATGCCTGTTGGCTACTGGGCTCATCCCAGCTGGCAGTGGAGACTGTAGTGTGTGCGTGTGTGCGT GCGTGTGTGTGTGTGTACGTGACCACGTTCTATCTGTTCATTTGTCTGGGTATAGTCACTCCTGGTGATGATA TGGGCTGAAATGTCTCCACGTCTCTTTGTGTCTTGTTGAAAAGAAACCCAAAGGAGTGTTGTGTGGACATGACTC ACCCTGAGGAGTCTCCAGGGATGGAGGTGGGGCATGCGGCCACTGGTCGGTGCTGGCCTGGCCTGGCCTGGGCCA CTTGACTCTCCCGGCTCTGCCACTGTTTTCTGAGAAATGTAGCATCCGCTGCAGCTGGCCACACTGAGGGCCCTC TGGGAACCCCACCCCACTGGAGCCGCTCCGGCAGCTCTTCCTGCCACTGAATGCGTTCTGCAGCATGTAGCATGC CCACCTAGCTCCTGGCCAGGGCCCTGGGGAGGCAGAGGGTACCCAGGGGACTGAGGGCTTAGAAATGACTTTCT CTATGAGGCTGGAACCTCCTCCTTCTTCCAGTGAAGCACGAGGTCTTGGTTCCAGGGTTCCTGGCCAGGTGCCCC CTTAGCATTTGTTCTTCATCTCCTGTCTTTCAAGCCTCCCCACTCCACCGTGCCGAAGGAGCTCTGCCAGTGGG CCTGGGCAGGCAGCCACAGAGGGCATGTTATCTGCTAAAGCAAACAGTCCTCCTGAGGCCCTGAGGGTGGCCCTG ACCCCTCAGGGCTCATTCCTGGTGGGCATGACTCGGTAAGGAGGTTCTGTGGGTAGGGCTGTTTGCTGGAATAA GGAGGGCTGAGCTGTTCCCCGCCACTGTTGAGGATCCCATCTGACATTTGGGGATTCACTGCATGAAGT TGTTCATTTGGGGCTCCAGTTTTTGTGCATTTCCAGACCAGGGTCCCTGTCTGGGAGCTCAGACTTAGCTGGGCT CCAGCAGCCTGGCTCCGGACTCTCGTCTGCCACCATCACCAGCTCTGTCTAAGCAATACTTACCCCTCCGGGCTT TCTCACCCATGTCTGGTTGGAGCTTCTCACAGCCACTCAAACCCTGACTTGATTTGACAACTGGGCCCTGTTGGT GGAGACCAGTGCCTGAACTGGACCCTGTGAAATCTGTCCCGTGGGAATCCTGAAGTCTGACTCAGGAATGCCCAG ACCTGTCCCTGTCCCTCAGCTCTAGGGTGAAAGGCGAGAGGTTGCACAGGACATGGACAGAGCAGCCCTTGG GTTTGTATCTGGTAGGGGAGAAAGCAGCAGGACAGTGGAGGTGTGTGGAAGGCACTCTTTCCACCTCTCTCCAGG CATTATCCCCAGGTGCTGAAATGGCTGTGGCCCCAGCACCTGAGGCAGGGGTACGCTACCTGGGGTAGCAGTAGA AAGGTCTTGGGGTCTGAATGACTTGGGGCCTCCATTCATAACCAAAGTTGTAGGGGCATGGAGGCAGTGGCGCCT TAACACCTCCCAAGAAAGATAGGGGAAGAAGCCAGAACCCCACCTGGCCTGCCCACAGGACAAGAAGTGGGTAAG GGCAGGAAGGAAATGAACGGAGTTAGCTCCCAGGCTCCTATCTCTGCCTGAGCCTCTATTCTTATATTATCAGAG AAAGGGACCATTGGGTGCATAGAGATGGGGAGGAGGCCACTGGGCTGAATTTTCTCTTTAGGCGGAAATGCTCTC CCCAGGCCCATTGCGTTCGTCAAGTTCTTGGAAATGGACAAAGGGCTCTGTCCTCCTCGACCCTAGTGGGGGATC AAGAAGGAAACTCCGTTGCAAAAGGGTATTTTAATCTCCTGTTTATGATATATTCACCTCTAGAGCAGTCACTGT

FIGURE 180B

CAGGGTGTTGCGAAAATACTCTACACCTTTGGGATGATAGGGTTGTTAGTGACCCACAGGACAGTATAGATGTTT GTGGATGTAGCACTGAGTGGTGATACCCAGACCAGCAGTCACCCCAGGAAGTGGGGGCTACCCATACCCTCATTC CTCTGGTGGGGAGCTGCCTGCAGAGAGGCCTGCCACTGGGGGTTCCAGGCCGTGGTGACCCTTGCCTCTGGGGAA CCTGGCTGCCAAAACTGCTCAGCAGTTGGGCCACTCCACTATTCCACCTCTCTAAAAGAAGGTAATTTCCTCCCC AAATTGACCTTGGGGAATTATTCTTTTAACCCTTTGCACCAAATAAGTTACTCATCCCCACCTGGATTTTACCCC ATGAGGGTAAAGTTGTGAGGCTGACACGTCTGTGTGATGCAGTGTGCGCTGCACTTAAGGGTCTGTTTCTCAGC ATCATGGATGCAGGGGCTTGTCTGAAAAGCCACTCTGGACCTAGCCTGTCCCAGAAGAGGAGAATGCACAAGTGT CCCTCCAGAAGTCTCCCACCCTGGGGCCAACTCACTGCCATGTTCAGTGTCCCGGCTCCAAATGCCCCCTTGCCC AGATGAAACCCTGCAGTGGTTACAGGAATGGAGCTCTTTGTCATTCCACCTCCTCTGGTCAGGCGAGGTTCACTG CGTCTGTCTTTGTATTCTGCTCTGTTCATTCTGTCCCACTTTCTTCATAGACTCCTTTTCCCTGCAATGGGTTT TTGGTATGAAAAAGGCTCCAGTAAATGGAGCCAAGTCTTGGTTTGACAAGGGGAACTTGATCCTTCAGGGAAGAA TCATCTCCAAAATGACTCCCCATCTGGTTTCTTCTACCACCCAATTCTACTAGGAAAGGAGCACTTAGGAGGCTC TTGGGATGCAGCAAGTCCCAGCAATGCCAGCATTTCATGGGGGCTGAGGCAGAACCCAGGAGCTCCAAGAAAGG CCACCCATAGAGCTCATCCTCTGTGGAATCACTGCCGGTTAGAACACTGAGGTCAAGCCAGTCCTCCCATGGTCA TGCCACCAGGGAAGCATGCCTGATCTCTTTTACTGCCAGCCTTGAGGAGAGCAGAAGCCTCCATTTTTA AAGACAATAAAGACCTCCAAGGGTACTTCTTTGGAAATGAAATGTAGCACAATCTTAGCCTACGTTACCAGGAGC CCTGACATGCAACCAGGGTCCCTCTTCCATGCCCTGCTGCCCAGGAGTTGCTGAGCTCCTCTCCCCTGGGGTTC ${\tt CAGCCCTCCTAATACCTCATATTCCCCATCTTCCTCAGCCCAGAAAGCAATGGGGCTTTAGTGATGCTCCTCTTT}$ TGTGTCTCTCTGGTTGCCTCTAGCACTGTGCAAACTCTGCAAGAAATTGCTGCCTTTGCTTGATGTTGTAGATGA GTTGCCCTCCACCTGGCTGGAGAGATGGCACATCATTCAGGGCCAGAAGGTTGTCCAGCAGTGTTTCTGCAGTGG CTGCAGGGAGATGGAAAAGAAGACCCTGCTTCCCTGCCTCCTACCTTTCTCTTCCACTCCTCAGAGTTTTC TTCTCCAGTATCCTGACATGTAAAGAGATTCTTTAAAATGCTGCTTCTTCTACTGGACTGTCTTTCACTGAGTAG GGGGCAAAACAAACAAGCATGATTGAAGAGCAGGGGAAGCCCACACAATCAGGTGAGCCCTGATGGGGGCTGGA CTGGCCTGGTCTGGCTGGGAAAGGATTCTTTTAAAAGCGTGCCTGAGCATCTCAGAGCAATGTCAGTGATGCCAA AGAGACCAACTTGGCCTCCTTGGGCACCAACTCTGATGGCTGAGTTGCACAAACGTGGCTCAGATGTTGGCATGC CCCCCGAACCCTGAGCTTGGGCTTGTGGGGCCCAGCATGGCTGTGCCTGTGAGGGAAGCCACATCAGTGAGAG AAAGTTGCATTCTCTCAGGGGCCTAGATTGGCTTGGGGCAGGTGCTTGTTGAAAAGCATGAGTGTTTCTGCTTTG GGAAACCCTTCCAGGGCTCTGGTTGGAAACTTGGCCAGTAAGGACAGGGCCTTGGGCCTCCCAAGGAGTTCACAA TGATGCCAGGAAGGGTCCCTGAGCCTGGGTTCCAGTCAGCTTGGCTAACAGAATGGGGCTTGGGAATTCCAGGGG CAACTGAGCATCCACCCCATTAGCCAGTGATCTGGACAGGGACAGCTGGCTACAGGGAATCAAAGGCTGTTCTGT ACAGTTTTACCAGAAACTGTGACCTTGGGTAAGGCTCCTCACTTTTCTGGGCCTCAACTTCCTCATCTGCAAAAT TGCGAGCCTGGTGCACCTGGTTCCTGTCTCCGTGGGCTGGTTTCCTTCAGCCCCTGATGCCCAGGCTGGGTGCAG GCTCTCATCTGGTCCATGCCCAGATGCTGCCTCAGACAAGAACTCTGGGAATCCTAACAGACTCTGCTTTCCTCT CTTCGTGGTTTGTCCTCCTCTTTTATTCTTGTGTAATGATGAGACATAATTAAGGGTCATCTACAATGGACAAT TTTCAAGGTGCTGATGTGATGTCACAACCTCCGCTACATCCTGAGTAAGTCAGTGTCCCCAACAGCAGATGAGGC TGGGTCTTTCCTCATTTCTGCTTCTGGGATGACATCAGTGGGAGAGTTGAAGATCTGAGAATTCTAAAGGAAATG TTCTCTGATGGGAGGAGAGGGAACTTATTTCCCTTCAAAGTAGTTTGCTTCTTAAGACCACTCCTCCTCCAG AATGTCTTTAACCAGACATCATTTCAGAAGGTGGGGCAGCTGCTTCCTTAGGAAGAGTGGGCCTGATAGCTCAAC CAACTCCTTTAGCATGTAAACTCACAGAAGGCAAGAACCCCTTTTTTTAGACTTTCCAAATGCATCCTGCAAAGA GAGAGATAGCTGATAGGGACTGACAAGCACACTGTTTAGATAAGAAGCAATTACCCTTTTATATCTGTGCTCTAT CGGCTGTTTCGTACAACATTCTTGCCAATTCCCTTGAGGAGAAAATTCTTCACATGGCTTCTGCATGTACAGTAT

193/6881 FIGURE 180C

TTGGGCAGCAAAACATGATTAAAGTCAGTTTGAAAATGG

194/6881 FIGURE 181

MFNGEPGPASSGASRNVVRSSSIGGEICGSQQAGGGAGTTTAKKRRSSLGAKMVAIVGLTQWSKSTLQLPQPEGA TKKLRSNIRRSTETGIAVEMRSRVTRQGSRESTDGSTNSNSSDGTFIFPTTRLGAESQFSDFLDGLGPAQIVGRQ TLATPPMGDVHIAIMDRSGQLEVEVIEARGLTPKPGSKSLPATYIKVYLLENGACLAKKKTKMTKKTCDPLYQQA LLFDEGPQGKVLQVIVWGDYGRMDHKCFMGMAQIMLDELDLSAAVTGWYKLFPTSSVADSTLGSLTRRLSQSSLE SATSPSCS

AAGCTGCTGACATCCTGGATCTAGGGTTGTAAAGAAGATTACATGAGCTAATGGATGTGAAAAACATCTTAAAAAC TCTCAAATACTTTTCAACTTTGGAGGATTATTATGATTTTCATTCTGTTCAGCGGCTATACTCAGACTTTACTCT TAATGCAGCATCTAGTGCTTTTTGCATGGCCCAAAGGGGCTCTGTGCTGCTCCACTACAGAGGAAACTTCAAGAA ATGCTGGTTTGCTACAGTGTTTTAGCTTGTGAGATTCTCTGGGACCTTCCCTGCTCCATCATGGGGTCACCTCTA GGTCATTTTACCTGGGACAAATACCTAAAAGAAACATGTTCAGTCCCAGCGCCTGTCCATTGCTTCAAGCAGTCC TACACACCTCCAAGCAACGAGTTCAAGATCAGTATGAAATTGGAAGCACAGGACCCCAGGAACACCACATCCACC TGTATTGCCACAGTAGTTGGACTGACAGGTGCCCGCCTTCGCCTGCGCCTTGATGGGAGCGACAACAAAAATGAC TTCTGGCGGCTGGTTGACTCAGCTGAAATCCAGCCTATTGGGAACTGTGAAAAGAATGGGGGTATGCTACAGCCA CCTCTTGGATTTCGGCTGAATGCGTCTTCTTGGCCCATGTTCCTTTTGAAGACGCTAAATGGAGCAGAGATGGCT CCCATCAGGATTTTCCACAAGGAGCCACCATCGCCTTCCCACAACTTCTTCAAAATGGGAATGAAGCTAGAAGCT GTGGACAGGAAGAACCCTCATTTCATTTGCCCAGCCACTATTGGGGAGGTTCGGGGGCTCAGAGGTGCTTGTCACT TTTGATGGGTGGCGAGGGGCCTTTGACTACTGGTGCCGCTTCGACTCCCGAGACATCTTCCCTGTGGGCTGGTGT TCCTTGACTGGAGACAACCTGCAGCCTCCTGGCACCAAAGTTGTGATTCCAAAGAATCCCTATCCTGCCTCCGAT GTGAATACTGAGAAGCCCAGCATCCACAGCAGCACCAAAACTGTCTTGGAACATCAACCAGGGCAGAGGGGGGCGT AAACCAGGAAAGAAGCGGGGCCGGACACCCAAGACCCTAATTTCCCATCCCATCTGCCCCATCCAAGACAGCT GAACCTTTGAAATTCCCAAAGAAGAGAGGTCCCAAACCTGGCAGCAAGAGAAACCTCGGACTTTGCTGAACCCA CCACCTGCCTCACCAACAACCAGCACTCCTGAACCGGATACCAGCACTGTACCCCAGGATGCTGCCACCATCCCC AGCTCAGCCATGCAGGCCCCAACAGTTTGTATCTACTTGAACAAGAATGGCAGCACAGGCCCCCACTTAGATAAG AAGAAGGTCCAGCAACTCCCTGACCATTTTGGACCAGCCCGTGCCTCTGTGGTGTTGCAGCAGGCTGTCCAGGCC GCCGTGTTTGACCGGGAACAGCATACCCTCAACCTCCCAGCAGTCAACAGCATCACCTACGTCCTCCGCTTCCTG GAGAAACTCTGCCACAACCTTCGTAGTGACAATCTGTTTGGCAACCAGCCCTTTACACAGACTCACTTGTCACTC CGCTCCTTGGAACCACACTCAGACTCAATGGACTCTGCCTCAAATCCCACCAACCTTGTCAGCACCTCCCAAAGG CACCGGCCCTTGCTTTCATCCTGTGGCCTCCCACCAAGCACTGCCTCAGCTGTGCGCAGGCTATGCTCCAGGGGA GTGTTAAAAGGATCAAATGAAAGGAAAGGGATATGGAATCATTTTGGAAACTAAATCGTTCCCCAGGGTCGGACCGA TACCTGGAGAGCCGCGATGCCTCTCGACTGAGTGGCCGGGACCCCTCCTCATGGACAGTCGAGGATGTGATGCAG TTTGTCCGGGAAGCTGATCCTCAGCTTGGACCCCACGCTGACCTGTTTCGCAAACACGAGATCGATGGCAAGGCC CTGCTGCTGCTGCGCAGTGACATGATGATGAAGTACATGGGCCTGAAGCTGGGGCCTGCACTCAAGCTCTCCTAC CACATTGACCGGCTGAAGCAGGGCAAGTTCTGAACCAGGAGAGGCAGCCTAGACAACCAAGTGGCAGCAGGTGGG GGCATTCTTCTAGGAATGAGGGGCATCAGCCCACCCCAGGCACCTCAGTGGGGTTCCGGGCCACCTCAGGACTCC AAGAGGCTGTGTGGAGCCACCACTCCTAGCCACAGCTGCCATGATAAGTCCTTCCATGAAGGACTGAGGAGGAG CCCTGGCTGGCCTCTCACCAGGAGTTTAGGCTGAATGCCTTCCACGTGATGGAGGAAAAGGCCAACTCTGTCCTG GTCTTGCTGTGGCACCCCATCGCCCCACAGCTCGTACCTTCTCACCAGATTCCCCTGAATCCAAACTCGTGGTGC AAACCTCTACCTTTTTTACAAAAAGATCTTATTGTTAATTTATTGTTTCTGGCACTTGGGCAAACCCTGTAGTTA CAGATAGGCGTGGCCCCTCTTCAGAGGACACTACCCTAGGGCACTTTCTCTTTTGAGGTGGAGAGACCCATAAAGC CTTGACCACATCACTCCATATGGGGAGGAGAAGGATCCCTGTCACCTTCTCCTCTCTCACGGGGCCCTTTTGCA GCCCTAGGCCTCATCTGTGGGAAGGGAGTCCCTGGCTTATACTGCCCCACCACAGCTCCTTGCCCTGGCCAGAA CTGCTGTCGAAGAAAATCAGGCCGGAAGGCCAAGAAGGCGCTAAGGGGGATGGGAGGGCAGGTTTTCCAGGCTGG AGTCGGTTCCACCCACTCGCCTGTCCACAGGCTTCCTTGTAAGCAAGTCAGCAGCACAGCTACTCACGCTGCCAT CTGGACTTATTTTATGTCAATCTGTTTATAAATAAAAACCAATATAGAT

196/6881 FIGURE 183

GCTGCAG<u>ATG</u>GCGGAAATGGATCCGGTAGCCGAGTTCCCCCAGCCTCCCGGTGCTGCGCGCTGGGCTGAGGTTAT GGCTCGCTTCGCGGCCAGGCTGGGCGCGCAGGGCCGGCGGGTGGTGTTACGTCAGGCGGCACCAAGGTCCC CCAGACTTGGCTGTCCGCTCTGCGGCCTTCGGGCCCAGCCCTTTCGGGCTTGCTGAGCCTGGAGGCCGAGGAGAA TGCACTTCCGGGTTTTGCTGAGGCTCTGAGGAGCTACCAGGAGGCTGCGGCTGCAGGCACCTTCCTGGCAGTAGA GTTCACCACTTTGGCGGACTATTTGCATCTGTTGCAGGCTGCGGCCCAGGCACTCAATCCGCTAGGCCCTTCTGC GATGTTTTACCTGGCTGCGGCTGTGTCAGATTTCTATGTTCCTGTCTCTGAAATGCCTGAACACAAGATCCAGTC ATCTGGGGGCCCACTGCAGATAACAATGAAGATGGTGCCAAAACTGCTTTCTCCTTTGGTTAAAGATTGGGCTCC AATTTATCAGCATCAAGTGGTGGTGGCTAATATCCTTGAGTCACGACAGTCCTTTGTGTTTATTGTAACCAAAGA CTCGGAAACCAAGTTATTGCTATCAAGGAAGAAA<u>TAG</u>AAAAAGGCGTAGAGATAGAAGAGAAGATAGTGGATAAT CTTCAGTCTCGACACACAGCTTTTATAGGTGACAGAAACTGAAGTAAAAAGCCCCTTATAGGATTAAAAATTGTTC AAAGGCAGTGGTGTGTAGGCAAATATGGTTTGGCATTCGTCTTTTAATGACACCTGATATGATGTCATTTTGATT TTGAAATTGAACACTAGAACTGTTAATCACCTTTAAAAAGAAGAGCTTATTGGGAATTATATATTCCTTAAAATA TACATGGGGGCCTGAATGTCAGCCATCTTTATACTATAGAAAAAGGATTATGGATGCATGAATGGTCATGCTTTG GAGATCAAATATTGGTTGAATGCCTATGTATGTCAGGCCCTGTGCTGAGCCATGAGGATTAAAAAGATGAATAAA AAAGG

197/6881 FIGURE 184

MAEMDPVAEFPQPPGAARWAEVMARFAARLGAQGRRVVLVTSGGTKVPLEARPVRFLDNFSSGRRGATSAEAFLA AGYGVLFLYRARSAFPYAHRFPPQTWLSALRPSGPALSGLLSLEAEENALPGFAEALRSYQEAAAAGTFLAVEFT TLADYLHLLQAAAQALNPLGPSAMFYLAAAVSDFYVPVSEMPEHKIQSSGGPLQITMKMVPKLLSPLVKDWAPKA FIISFKLETDPAIVINRARKALEIYQHQVVVANILESRQSFVFIVTKDSETKLLLSRKK

198/6881 FIGURE 185

CGGGAGCGGAGAGCGCACAGAGAGCCCTGAGCAGCCCCACCGCCGCCGGCCTAGTTACCATCACACCCC GGGAGGAGCCGCAGCTGCCGCAGCCGGCCCCAGTCACCATCACCGCAACCATGAGCAGCCGAGGCCGAGACCCAGC CAGGGAGCGGTGGCCCGGGCGCCTCACATCGGCGGCGCGCCTGCCGGGGGGACAAGAAGGTCATCGCAACGAAGG TTTTGGGAACAGTAAAATGGTTCAATGTAAGGAACGGATATGGTTTCATCAACAGGAATGACACCAAGGAAGATG TATTTGTACACCAGACTGCCATAAAGAAGAATAACCCCAGGAAGTACCTTCGCAGTGTAGGAGATGGAGAGACTG TGGAGTTTGATGTTGAAGGAGAAAAGGGTGCGGAGGCAGCAAATGTTACAGGTCCTGGTGGTGTTCCAGTTC AAGGCAGTAAATATGCAGCAGACCGTAACCATTATAGACGCTATCCACGTCGTAGGGGTCCTCCACGCAATTACC AGCAAAATTACCAGAATAGTGAGAGTGGGGAAAAGAACGAGGGATCGGAGAGTGCTCCCGAAGGCCAGGCCCAAC AACGCCGGCCCTACCGCAGGCGAAGGTTCCCACCTTACTACATGCGGAGACCCTATGGGCGTCGACCACAGTATT CCAACCCTCCTGTGCAGGGAGAAGTGATGGAGGGTGCTGACAACCAGGGTGCAGGAGAACAAGGTAGACCAGTGA GGCAGAATATGTATCGGGGATATAGACCACGATTCCGCAGGGGCCCTCCTCGCCAAAGACAGCCTAGAGAGACG GCAATGAAGAAGATAAAGAAAATCAAGGAGATGAGACCCAAGGTCAGCAGCCACCTCAACGTCGGTACCGCCGCA ACTTCAATTACCGACGCAGACGCCCAGAAAACCCTAAACCACAAGATGGCAAAGAGACAAAAGCAGCCGATCCAC ${\tt CAGCTGAGAATTCGTCCGCTCCCGAGGCTGAGCAGGGCGGGGCTGAG} \underline{{\tt TAA}} {\tt ATGCCGGCTTACCATCTCTACCATC}$ ATCCGGTTTAGTCATCCAACAAGAAGAATATGAAATTCCAGCAATAAGAATGAACAAAAGATTGGAGCTGAAG ACCTAAAGTGCTTGCTTTTTGCCCGTTGACCAGATAAATAGAACTATCTGCATTATCTATGCAGCATGGGGTTTT TATTATTTTTACCTAAAGACGTCTCTTTTTGGTAATAACAAACGTGTTTTTTAAAAAAAGCCTGGTTTTTCTCAAT **ACGCCTTTAAAGG**

199/6881 FIGURE 186

MSSEAETQQPPAAPPAAPALSAADTKPGTTGSGAGSGGPGGLTSAAPAGGDKKVIATKVLGTVKWFNVRNGYGFI
NRNDTKEDVFVHQTAIKKNNPRKYLRSVGDGETVEFDVVEGEKGAEAANVTGPGGVPVQGSKYAADRNHYRRYPR
RRGPPRNYQQNYQNSESGEKNEGSESAPEGQAQQRRPYRRRFPPYYMRRPYGRRPQYSNPPVQGEVMEGADNQG
AGEQGRPVRQNMYRGYRPRFRRGPPRQRQPREDGNEEDKENQGDETQGQQPPQRRYRRNFNYRRRPENPKPQDG
KETKAADPPAENSSAPEAEQGGAE

200/6881 FIGURE 187

GGCGGTTGCCGTTCCGTTAGGTCTGAGGGAGCGATGCCGCTTCGAGCTTGAAGCTGCTGACCACACTGC TGGCTGTCGTGGCCGCTCCCCAAGCCGAGGTCGAGTCCGAGGCAGGATGGGGCATGGTGACGCCTGATCTGC TCTTCGCCGAGGGGACCGCAGCCTACGCGCGGGGGACTGGCCCGGGGTGGTCCTGAGCATGGAACGGGCGCTGC GCTCCCGGGCAGCCCTCCGCGCCCTTCGCCTGCGCTGCCCCAGTGTGCCGCCGACTTCCCGTGGGAGCTGG ACCCCGACTGGTCCCCCAGCCCGGCCCAGGCCTCGGGCCGCCGCCCTGCGGACCTGAGCTTCTTCGGGGGCC TGGAGTTCCGCAAGCGGAGCCCCTACAACTACCTGCAGGTCGCCTACTTCAAGATCAACAAGTTGGAGAAAGCTG TTGCTGCAGCACACCCTTCTTCGTGGGCAATCCTGAGCACATGGAAATGCAGCAGAACCTAGACTATTACCAAA CCATGTCTGGAGTGAAGGAGGCCGACTTCAAGGATCTTGAGACTCAACCCCATATGCAAGAATTTCGACTGGGAG TGCGACTCTACTCAGAGGAACAGCCACAGGAAGCTGTGCCCCACCTAGAGGCGGCGCTGCAAGAATACTTTGTGG CCTATGAGGAGTGCCGTGCCCTCTGCGAAGGGCCCTATGACTACGATGGCTACAACTACCTTGAGTACAACGCTG CCCACCCAAGTCGAGAGAGCCCTTTGAAGACTTCCTCCCATCGCATTATAATTATCTGCAGTTTGCCTACTATA ACATTGGGAATTATACACAGGCTGTTGAATGTGCCAAGACCTATCTTCTCTTCTTCTCCCCAATGACGAGGTGATGA ACCAAAATTTGGCCTATTATGCAGCTATGCTTGGAGAAGAACACACCAGATCCATCGGCCCCCGTGAGAGTGCCA AGGAGTACCGACAGCGAAGCCTACTGGAAAAAGAACTGCTTTTCTTCGCTTATGATGTTTTTTGGAATTCCCTTTG TGGATCCGGATTCATGGACTCCAGAAGAAGTGATTCCCAAGAGATTGCAAGAGAAACAGAAGTCAGAACGGGAAA CAGCCGTACGCATCTCCCAGGAGATTGGGAACCTTATGAAGGAAATCGAGACCCTTGTGGAAGAGAAGACCAAGG AGTCACTGGATGTGAGCAGACTGACCCGGGAAGGTGGCCCCCTGCTGTATGAAGGCATCAGTCTCACCATGAACT CCAAACTCCTGAATGGTTCCCAGCGGTTGATGGACGGCGTAATCTCTGACCACGAGTGTCAGGAGCTGCAGA GACTGACCAATGTGGCAGCAACCTCAGGAGATGGCTACCGGGGTCAGACCTCCCCACATACTCCCAATGAAAAGT TCTATGGTGTCACTGTCTTCAAAGCCCTCAAGCTGGGGCAAGAAGGTCCCTCTGCAGAGTGCCCACCTGT ACTACAACGTGACGGAGAAGGTGCGGCGCATCATGGAGTCCTACTTCCGCCTGGATACGCCCCTCTACTTTTCCT GCGCCATCCTTTACCTAAATGGGGACTTCGATGGCGGAAACTTTTATTTCACTGAACTGGATGCCAAGACCGTGA CGGCAGAGGTGCAGCCTCAGTGTGGAAGAGCCGTGGGATTCTCTTCAGGCACTGAAAACCCACATGGAGTGAAGG CAGCTCGAGCGGGTGAGAGCAGCTGGTGCTGTGGTGACCCGTTCCCAGAGCGCCCTTGGTTTGCCTTTCTCTCC CCAAATCCCATTGCCAGTGGCTGAGACACGAAAGGAGCACTTGGGACACCAGCTCCAACGCCCTGTCATTATGGT CACATTGCCTTGTCCTCCTGGGCCTGTGAACGGGATCCAGGTGGGGAAAGAGGTCAAGACAGGAGCGATG CTGAGTTCTTGGTTCCCTCCTTGGGCCCCACTTCAGCTGTCCTTTTCCAGAGAGTAGGACCTGCTGGGAAGGAGA TGAGCCTGGGGCCATTAAGGAACCTTCCTTGTCCCCTGGGAAGTAGCAGCTGAGAGATAGCGAGTGTCTGGAGCG CAGCCCAGAAGAGATGGACCTCTCCCAGGAGCAGCCCCTGGATGCCCAGCAGGGTCCCCCCGAACCTGCACAAGA GTCTCTCTCAGGCAGTGAATCGAAGCCCAAGGATGACTATGACAGCGTCCAGGTCAGACGGATGGGTGACTAGA CCCATGGAGAGGAACTCTTCTGCACTCTGAGCTGGCCAGCCCCTCGGGGCTGCAGAGCAGTGAGCCTACATCTGC CACTCAGCCGAGGGGACCCTGCTCACAGCCTTCTACATGGTGCTACTGCTCTTGGAGTGGACATGACCAGACACC GCACCCCTGGATCTGGCTGAGGGCTCAGGACACAGGCCCAGCCACCCCAGGGGCCTCCACAGGCCGCTGCATG

TAGTCGCGGGTCCCCGAGTGAGCACGCCAGGGAGCCAGGCCAAACGACGGGGGTCGGAGTCAGAGTCGCAGTG GGAGTCCCCGGACCGGAGCACGAGCCTGAGCGGGAGAGCGCCGCTCGCACCCGTCGCACCCGCGTACCCGGC TGGGAGGAGCAGTGCTTGGCTCCTGCAGTTTGGCTACAACACTGGAGTCATCAATGCCCCCCAGAAGGTGATCG AGGAGTTCTACAACCAGACATGGGTCCACCGCTATGGGGAGAGCATCCTGCCCACCACGCTCACCACGCTCTGGT CCCTCTCAGTGGCCATCTTTTCTGTTGGGGGCATGATTGGCTCCTTCTCTGTGGGCCTTTTCGTTAACCGCTTTG GCCGGCGGAATTCAATGCTGATGATGAACCTGCTGGCCTTCGTGTCCGCCGTGCTCATGGGCTTCTCGAAACTGG GCAAGTCCTTTGAGATGCTGATCCTGGGCCGCTTCATCATCGTGTGTACTGCGGCCTGACCACAGGCTTCGTGC CCATGTATGTGGGTGAAGTGTCACCCACAGCCTTTCGTGGGGCCCTGGGCACCCTGCACCAGCTGGGCATCGTCG TCGGCATCCTCATCGCCCAGGTGTTCGGCCTGGACTCCATCATGGGCAACAAGGACCTGTGGCCCCTGCTGCTGA GCATCATCTTCATCCCGGCCCTGCTGCAGTGCATCGTGCTGCCCTTCTGCCCCGAGAGTCCCCGCTTCCTGCTCA TCAACCGCAACGAGGAGAACCGGGCCAAGAGTGTGCTAAAGAAGCTGCGCGGGACAGCTGACGTGACCCATGACC TGCAGGAGATGAAGGAAGAGTCGGCAGATGATGCGGGAGAAGAAGGTCACCATCCTGGAGCTGTTCCGCTCCC CCGCCTACCGCCAGCCCATCCTCATCGCTGTGGTGCTGCAGCTGTCCCAGCAGCTGTCTGGCATCAACGCTGTCT TCTATTACTCCACGAGCATCTTCGAGAAGGCGGGGGTGCAGCAGCCTGTGTATGCCACCATTGGCTCCGGTATCG TCGCTGGCATGGCGGTTTGTGCCATACTCATGACCATCGCGCTAGCACTGCTGGAGCAGCTACCCTGGATGTCCT ATCTGAGCATCGTGGCCATCTTTGGCTTTGTGGCCTTCTTTGAAGTGGGTCCTGGCCCCATCCCATGGTTCATCG TGGCTGAACTCTTCAGCCAGGGTCCACGTCCAGCTGCCATTGCCGTTGCAGGCTTCTCCAACTGGACCTCAAATT TCATTGTGGGCATGTGCTTCCAGTATGTGGAGCAACTGTGTGGTCCCTACGTCTTCATCATCTTCACTGTGCTCC TGGTTCTGTTCTTCATCTTCACCTACTTCAAAGTTCCTGAGACTAAAGGCCGGACCTTCGATGAGATCGCTTCCG GCTTCCGGCAGGGGGGAGCCAGCCAAAGTGATAAGACACCCGAGGAGCTGTTCCATCCCCTGGGGGCTGATTCCC AAGTG<u>TGAG</u>TCGCCCCAGATCACCAGCCCGGCCTGCTCCCAGCAGCCCTAAGGATCTCTCAGGAGCACAGGCAGC CCAGAAGAATATTCAGGACTTAACGGCTCCAGGATTTTAACAAAAGCAAGACTGTTGCTCAAATCTATTCAGACA AGCAACAGGTTTTATAATTTTTTTTATTACTGATTTTGTTATTTTTTATATCAGCCTGAGTCTCCTGTGCCCACATC CCAGGCTTCACCCTGAATGGTTCCATGCCTGAGGGTGGAGACTAAGCCCTGTCGAGACACTTGCCTTCTTCACCC AGCTAATCTGTAGGGCTGGACCTATGTCCTAAGGACACTAATCGAACTATGAACTACAAAGCTTCTATCCCAG GAGGTGGCTATGGCCACCCGTTCTGCTGGCCTGGATCTCCCCACTCTAGGGGTCAGGCTCCATTAGGATTTGCCC CTTCCCATCTCTTCCTACCCAACCACTCAAATTAATCTTTCTTTACCTGAGACCAGTTGGGAGCACTGGAGTGCA GGGAGGAGAGGGGAAGGGCCAGTCTGGGCTGCCGGGTTCTAGTCTCCTTTGCACTGAGGGCCACACTATTACCAT GAGAAGAGGGCCTGTGGGAGCCTGCAAACTCACTGCTCAAGAAGACATGGAGACTCCTGCCCTGTTGTGTATAGA TGCAAGATATTTATATATTTTTTGGTTGTCAATATTAAATACAGACACTAAGTTATAGTATATCTGGACAAGCC AACTTGTAAATACACCACCTCACTCCTGTTACTTACCTAAACAGATATAAATGGCTGGTTTTTAGAAACATGGTT AACGGCTTAGACTTCGACTCAGGATCCAGTCCCTTACACGTACCTCTCATCAGTGTCCTCTTGCTCAAAAATCTG TTTGATCCCTGTTACCCAGAGAATATATACATTCTTTATCTTGACATTCAAGGCATTTCTATCACATATTTGATA GTTGGTGTTCAAAAAAACACTAGTTTTGTGCCAGCCGTGATGCTCAGGCTTGAAATCGCATTATTTTGAATGTGA **AGGGAA**

202/6881 FIGURE 189

MEPSSKKLTGRLMLAVGGAVLGSLQFGYNTGVINAPQKVIEEFYNQTWVHRYGESILPTTLTTLWSLSVAIFSVG
GMIGSFSVGLFVNRFGRRNSMLMMNLLAFVSAVLMGFSKLGKSFEMLILGRFIIGVYCGLTTGFVPMYVGEVSPT
AFRGALGTLHQLGIVVGILIAQVFGLDSIMGNKDLWPLLLSIIFIPALLQCIVLPFCPESPRFLLINRNEENRAK
SVLKKLRGTADVTHDLQEMKEESRQMMREKKVTILELFRSPAYRQPILIAVVLQLSQQLSGINAVFYYSTSIFEK
AGVQQPVYATIGSGIVNTAFTVVSLFVVERAGRRTLHLIGLAGMAGCAILMTIALALLEQLPWMSYLSIVAIFGF
VAFFEVGPGPIPWFIVAELFSQGPRPAAIAVAGFSNWTSNFIVGMCFQYVEQLCGPYVFIIFTVLLVLFFIFTYF
KVPETKGRTFDEIASGFRQGGASQSDKTPEELFHPLGADSQV

CACGTCGTTCACGGCCTTCTTCGGCCCCTCTAGCACGACATTGAGGCCTGGCTTCAGAAGCCCTCGGGAAAACGC CTCGCCGCACGCACGTCCCACACACTACTGCTCAACTTTTGATTGGGACTTCCGCTTCCGGCGGCAAACCATAC TTCCGGTTTGTCGTTGCTATAGGAACCGCTACGGCGTTTGAAAGTGTCCGGGTTGCTTAGGATCCCTACAGGTAG $\tt CGCCTCTGGATACATGCGTGGTCTGCTGACCCAGAGAGAAACGAAAGCAGAACTGTTTGGCGGGAGATC\underline{ATG}TCA$ GCCGTGGTAGCTCAGACGCTGCATGTTTTTGGTCTTCGATCCCACGTGGCCAACAATATCTTCTACTTCGATGAA GGCTCAGAGAAGAGTCAGGGCATGTTGGCCTTGTCCATCAGTCCCAATCGGCGGTACCTCGCTATCTCTGAGACT GTGCAAGAAAAACCTGCCATCACCATTTATGAATTGTCATCCCTTGCCGGAAGCGCAAAGTTCTTAATAAT TTTGACTTCCAAGTTCAGAAATTTATTAGCATGGCTTTTTCTCCAGACTCCAAATACCTATTGGCTCAGACGTCA CCTCCAGAGTCAAATCTTGTCTACTGGCTGTGGGAAAAACAGAAAGTAATGGCCATTGTTAGAATCGACACTCAG AACAACCCTGTCTACCAGGTGAGCTTCAGTCCACAGGATAACACTCAGGTGTGTCACTGGAAATGGGATGTTT AAGCTTCTCCGTTTTGCTGAGGGAACCCTGAAGCAAACCAGCTTTCAGAGGGGAGAACCCCAAAACTATCTAGCC CACACCTGGGTGGCTGATGACAAGATTGTCGTTGGCACTGACACAGGCAAACTCTTCCTCTTTGAATCTGGAGAT CAGCGTTGGGAGACCAGCATAATGGTCAAGGAACCTACCGATGGCTCAAAGAGCCTGGATGTCATTCAGGAATCA GAGAGCCTGATTGAATTTCCACCAGTCAGTTCTCCACTCCCTTCCTATGAACAGATGGTGGCGGCCAGTAGCCAT AGCCAGATGTCCATGCCCCAGGTGTTTGCCATTGCAGCCTATTCAAAGGGATTTGCCTGTTCTGCTGGGCCAGGG AGAGTTCTGCTGTTTGAGAAGATGGAAGAAAAGGATTTTTACCGTGAGAGCAGAGAAATCAGGATTCCTGTGGAC CCGCAGAGCAATGATCCAAGTCAGTCTGACAAACAGGACGTTCTCTGCCTGTGCTTCAGCCCCTCAGAGGAAACT CTGGTTGCCAGCACCAGTAAGAACCAACTCTACAGCATCACCATGTCCCTGACAGAGATCAGCAAGGGAGCCTGC TCACTTTGAGTATTTGATGTATCCATTGCACTCAGCACCCATCACCGGTCTAGCTACCTGCATCCGCAAACCCCT TATAGCCACCTGTTCTCTGGATCGATCCATCCGCCTTTGGAATTATGAAACAACACCCTGGAACTATTTAAGGA ATACCAAGAAGAGGCATATTCCATCAGCCTTCATCCATCTGGACACTTCATTGTAGTAGGGTTTGCTGACAAACT ACGCCTCATGAATCTACTCATTGATGATATACGTTCTTTCAAAGAATACTCTGTTAGAGGATGCGGAGAGTGTTC CTTTAGCAATGGAGGTCACCTGTTTGCTGCAGTCAATGGAAATGTGATTCACGTTTACACCACCACGAGCCTAGA GAACATCTCAAGCCTGAAAGGACACACAGGGAAGATTCGCTCAATTGTGTGGAATGCAGATGATAGCAAACTGAT GTCTTGCAGCTACAACTGTGTTACTGTCTCCCCCGATGCCAAAATTATCTTTGCTGTTGGATCAGACCACACCCT CAAGGAGATTGCAGATTCCTTGCCTTCGAGAGATATCGGCGTTTGATGTCACCTACACCGCCATTGTCATCTCGC ATTCTGGACGCATGATGTTTGTGGGCACCTCGGTGGGAACCATTCGTGCCATGAAGTACCCTCTGCCTCTGCAGA AGGAATTCAATGAGTACCAGGCCCATGCCGGTCCTATCACCAAGGTGAGCAGGGCCCTCTCCCCAGGAACCCAGT ATTTATTCATCCATCATTCATTGAATCACCATCTATTGACTATGAATATCTCTTTGTTTAAACTACTTCCAGGA AAGGGGCCGTTTGGTGGATGCCGTAGCTGCCGTGAGTGTGGGCTGCACTTGACCACAGCTGCCTCCTCCTCCAGA GAATGCCCCAGACTGAAAGGAGCCATAGCCCTGAAGATTGGCCCCTACCTCTCCCTGAGGGTACAAAAGGCCACC CCAGGGGCAATACCATGAGTACACATTTGTAAATTGTCCTTCCATTCACCCTTCTCATAAAGTAGTATCTATGTT CAACAGTCAAAATGTGGAAGCAACCAAGCATCCATCGACAGACGAATGCATAAGCAAAAGATGGTATATCTATAC **AATGGAACAATACCCTGCCTAAAAAGGAAGGGAATTCTGCAATGTGCTACCACATGGATGAACCTTGAGGATGTT** ATGCTAAATTAAATAAGGCCAACCACAAAAAGATAAGTACAGTGTGATTCCACTTTTAGGAGATACTTGGAGCAG TCAGAATCACAAAGACAGAGTGGTGGTTGGCAGGGGCTGCAGGAAGGGGGAATGAGGAATGATTGTTTCATAGGT ATAGAGTTTTGGTTTTACAAGACAAAAGGATTATGGGGGGTAGTTGGTGGCAATGGCTGCACAACATTACAAATGT ATTTAATAACATGAACTGTACACTTGAAAATGGTTAAGATAGCAAATTTTACAGAATATGTATTTTACGACAATT TTAAAAATGAAATAAAAAAGAATTATCTTGC

MSAVVAQTLHVFGLRSHVANNIFYFDEQIIIFPSGNHCVKYNVDQKWQKFIPGSEKSQGMLALSISPNRRYLAIS
ETVQEKPAITIYELSSIPCRKRKVLNNFDFQVQKFISMAFSPDSKYLLAQTSPPESNLVYWLWEKQKVMAIVRID
TQNNPVYQVSFSPQDNTQVCVTGNGMFKLLRFAEGTLKQTSFQRGEPQNYLAHTWVADDKIVVGTDTGKLFLFES
GDQRWETSIMVKEPTNGSKSLDVIQESESLIEFPPVSSPLPSYEQMVAASSHSQMSMPQVFAIAAYSKGFACSAG
PGRVLLFEKMEEKDFYRESREIRIPVDPQSNDPSQSDKQDVLCLCFSPSEETLVASTSKNQLYSITMSLTEISKG
EPAHFEYLMYPLHSAPITGLATCIRKPLIATCSLDRSIRLWNYETNTLELFKEYQEEAYSISLHPSGHFIVVGFA
DKLRLMNLLIDDIRSFKEYSVRGCGECSFSNGGHLFAAVNGNVIHVYTTTSLENISSLKGHTGKSLNCVECR

205/6881 FIGURE 192

GCGATTCGGTGGCACGTGGAGCCACGGCGTGGGAGTAGGGGGCTGAAGGCAGCAGCAGCAGCCAGGGCCGCCCT $\verb|CCGAGGGCTTCTGAAGCCAGGCCTCAATGTCGTGCTAGAGGGGGCCGAAGAAGGCCGTGAACGACGTGAATGGCCT|\\$ GAAGCAATGTTTGGCAGAATTCAAGCGGGATCTGGAATGGGTTGAAAGGCTCGATGTGACACTGGGTCCGGTACC GGAGATCGGTGGATCTGAGGCGCCAGCACCTCAGAACAAGGACCAGAAAGCTGTTGATCCAGAAGACGACTTCCA GCGAGAGATGAGTTTCTATCGCCAAGCCCAGGCCGCAGTGCTTGCAGTCTTACCCCGCCTCCATCAGCTCAAAGT CCCTACGAAGCGACCCACTGATTATTTTGCGGAAATGGCCAAATCTGATCTGCAGGTGCAGAAGATTCGACAGAA GCTGCAGACTAAACAGGCTGCCATGGAGAGGTCTGAAAAAGCTAAGCAACTGCGAGCACTTAGGAAATACGGGAA GAAGGTGCAAACGGAGGTTCTTCAGAAGAGGCCAGGAGAAAGCCCATATGATGAATGCTATTAAGAAATATCA GAAAGGCTTCTCTGATAAACTGGATTTCCTTGAGGGAGATCAGAAACCTCTGGCACAGCGCAAGAAGGCAGGAGC CAAAGGCCAGCAGATGAGGAAGGGCCCAGTGCTAAACGACGGTATAAAAACCAGAAGTTTGGTTTTGGTGGAAA GAAGAAAGGCTCAAAGTGGAACACTCGGGAGAGCTATGATGATGTATCTAGCTTCCGGGCCAAGACAGCTCATGG CAGAGGCCTCAAGAGGCCTGGCAAGAAAGGGTCAAATAAGAGACCTGGAAAACGAACAAGAGAGAAGATGAAGAA CAGAACACAC<u>TAA</u>ATAGCATCTTTGAATACAAAGAACCAAGAAAAAGGAATGAAGACTCGCAATTTCACGACACA TTGAGTTCAAATTGCCTTCATTTTATGATAAATAATGATTTAACTGAAAA

206/6881 FIGURE 193

MDTPPLSDSESESDESLVTDRELQDAFSRGLLKPGLNVVLEGPKKAVNDVNGLKQCLAEFKRDLEWVERLDVTLG
PVPEIGGSEAPAPQNKDQKAVDPEDDFQREMSFYRQAQAAVLAVLPRLHQLKVPTKRPTDYFAEMAKSDLQVQKI
RQKLQTKQAAMERSEKAKQLRALRKYGKKVQTEVLQKRQQEKAHMMNAIKKYQKGFSDKLDFLEGDQKPLAQRKK
AGAKGQQMRKGPSAKRRYKNQKFGFGGKKKGSKWNTRESYDDVSSFRAKTAHGRGLKRPGKKGSNKRPGKRTREK
MKNRTH

207/6881 FIGURE 194

CCACGCGTCCGGGCGTAAGCCAGGCGTGTTAAAGCCGGTCGGAACTGCTCCGGAGGGCACGGGCTCCGTAGGCAC ${\tt CAACTGCAAGGACCCCTCCCCTGCGGGCGCTCCC} {\tt ATG} {\tt GCACAGTTCGCGTTCGAGAGTGACCTGCACTCGCTGC}$ TTCAGCTGGATGCACCCATCCCCAATGCACCCCTGCGCGCTGGCAGCGCAAAGCCAAGGAAGCCGCAGGCCCGG CCCCTCACCCATGCGGGCCGCCAACCGATCCCACAGCGCCGGCAGGACTCCGGGCCGAACTCCTGGCAAATCCA GTTCCAAGGTTCAGACCACTCCTAGCAAACCTGGCGGTGACCGCTATATCCCCCATCGCAGTGCTGCCCAGATGG AGGTGGCCAGCTTCCTCCTGAGCAAGGAGAACCAGTCTGAAAACAGCCAGACGCCCACCAAGAAGGAACATCAGA AAGCCTGGGCTTTGAACCTGAACGGTTTTGATGTAGAGGAAGCCAAGATCCTTCGGCTCAGTGGAAAACCACAAA ATGCGCCAGAGGGTTATCAGAACAGACTGAAAGTACTCTACAGCCAAAAGGCCACTCCTGGCTCCAGCCGGAAGA $\tt CCTGCCGTTACATTCCTTGCCAGACCGTATCCTGGATGCGCCTGAAATCCGAAATGACTATTACCTGAACC$ TTGTGGATTGGAGTTCTGGGAATGTACTGGCCGTGGCACTGGACAACAGTGTGTACCTGTGGAGTGCAAGCTCTG ACTACTTGGCTGTGGGCACCAGCAGTGCTGAGGTGCAGCTATGGGATGTGCAGCAGCAGAAACGGCTTCGAAATA TGACCAGTCACTCTGCCCGAGTGGGCTCCCTAAGCTGGAACAGCTATATCCTGTCCAGTGGTTCACGTTCTGGCC ACATCCACCATGATGTTCGGGTAGCAGAACACCATGTGGCCACACTGAGTGGCCACAGCCAGGAAGTGTGTG GGCTGCGCTGGGCCCCAGATGGACGACATTTGGCCAGTGGTGGTAATGATAACTTGGTCAATGTGTGGCCTAGTG CTCCTGGAGAGGGTGGCTGGGTTCCTCTGCAGACATTCACCCAGCATCAAGGGGCTGTCAAGGCCGTAGCATGGT GTCCCTGGCAGTCCAATGTCCTGGCAACAGGAGGGGGGCACCAGTGATCGACACATTCGCATCTGGAATGTGTGCT CTGGGGCCTGTCTGAGTGCCGTGGATGCCCATTCCCAGGTGTGCTCCATCCTCTGGTCTCCCCATTACAAGGAGC TCATCTCAGGCCATGGCTTTGCACAGAACCAGCTAGTTATTTGGAAGTACCCAACCATGGCCAAGGTGGCTGAAC TCAAAGGTCACACATCCCGGGTCCTGACTCTGACCATGAGCCCAGATGGGGCCACAGTGGCATCCGCAGCAGCAG AAAGTCATGTCTCCCTTCATGTTTTTTTTTTTAAAA

MAQFAFESDLHSLLQLDAPIPNAPPARWQRKAKEAAGPAPSPMRAANRSHSAGRTPGRTPGKSSSKVQTTPSKPG GDRYIPHRSAAQMEVASFLLSKENQSENSQTPTKKEHQKAWALNLNGFDVEEAKILRLSGKPQNAPEGYQNRLKV LYSQKATPGSSRKTCRYIPSLPDRILDAPEIRNDYYLNLVDWSSGNVLAVALDNSVYLWSASSGDILQLLQMEQP GEYISSVAWIKEGNYLAVGTSSAEVQLWDVQQQKRLRNMTSHSARVGSLSWNSYILSSGSRSGHIHHHDVRVAEH HVATLSGHSQEVCGLRWAPDGRHLASGGNDNLVNVWPSAPGEGGWVPLQTFTQHQGAVKAVAWCPWQSNVLATGG GTSDRHIRIWNVCSGACLSAVDAHSQVCSILWSPHYKELISGHGFAQNQLVIWKYPTMAKVAELKGHTSRVLSLT MSPDGATVASAAADETLRLWRCFELDPARREREKASAAKSSLIHQGIR

GGCACGAGGGAACCGTCCGCAGCCGCGGAGCCGGGAGCCCTGCCCAAGTCGGAGCGGCGTCCCCTGCTGAGCCC TCTACTTGACGTCTACGCCCAGCACCTGGCCTTCTTCAGCCGCTTCAGTGCCCGAGGCCCTGCCCATGCCCTCC ACCCAGCTGCTAGCAGCAGCAGCAGCAGCAACTGCTCCCGGCCCAACGCCACCGCCTCTAGCTCCGGGCTCC CTGAGGTCCCCAGTGCCCGGTCCCACGGCTCCCACGCTGCCACCCTGTCCTGACTCGCCACCTGGTCTTG · CGGGTGCACAGGGAGAACCCAGGCGTGCTCATGGGCGGCCGATACACACCGCCCGACTGCACCCCAGCCCAGACG $\tt GTGGCGGTCATCATCCCCTT{\color{red}{TAG}} ACACCGGGAACACCACCTGCGCTACTGGCTCCACTATCTACACCCCATCTTG$ AGGCGGCAGCGGCTACGGCGTCTATGTCATCAACCAGCATGGTGAGGACACCTTCAACCGGGCCAAGCTG CTTAACGTGGGCTTCCTAGAGGCGCTGAAGGAGGATGCCGCCTATGACTGCTTCATCTTCAGCGATGTGGACCTG GTCCCCATGGATGACCGCAACCTATACCGCTGCGGCGACCAACCCCGCCACTTTGCCATTGCCATGGACAAGTTT GGCTTCCGGCTTCCCTATGCTGGCTACTTTGGAGGTGTCAGGCCTGAGTAAGGCTCAGTTTCTGAGAATCAAT GGCTTCCCCAATGAGTACTGGGGCTGGGGTGGCGAGGATGATGACATCTTCAACCGGATCTCCCTGACTGGGATG AAGATCTCACGCCCAGACATCCGAATTGGCCGCTACCGCATGATCAAGCACGACCGCGACAAGCATAACGAACCT AACCCTCAGAGGTTTACCAAGATTCAAAACACGAAGCTGACCATGAAGCGGGACGGCATTGGGTCAGTGCGGTAC TGGCAGCTGCTCTGTGGAGGACCTCCAGGACTGAGACTGGGCTCTGTTTTCCAAGGGTCTTCACTAGGCCCCCTA GGAGTCAACCCTCCTTCCCGACCCCCTCCCCCTAGCCCAGCCCCAGTCACTGTCAGGGTCGGGCCAGCCCCTGCA CTGCCTCGCAGAGTGGCCTGGGCTAGGTCACTCCACCTCTGTGCCTCAGTTTCCCCCCCTTGAGTCCCCTAGG GCCTGGAAGGGTGGGAGGTATGTCTAGGGGGCAGTGTCTCTTCCAGGGGGAATTCTCAGCTCTTGGGAACCCCCT TGCTCCCAGGGGAGGGGAAACCTTTTTCATTCAACATTGTAGGGGGCAAGCTTTGGTGCGCCCCCTGCTGAGGAG GGTGGGGCTTGGATCAGTAAGTCTGGTTCCCGCCTCCCTGTCTGAGAGAGGAGGCAGGAGCCCCAGGGCCGGCTT

FIGURE 197

MSRLLGGTLERVCKAVLLLCLLHFLVAVILYFDVYAQHLAFFSRFSARGPAHALHPAASSSSSSSNCSRPNATAS SSGLPEVPSALPGPTAPTLPPCPDSPPGLAGAQGEPRRAHGRPIHTARLHPSPDGGGHHPL

FIGURE 198

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GCCAGCAGCCGGATGCCCGGGCCCACTGGGCGGGCCAGTGGCCGCCTGCGGGATGAGCAGACTGCTGGGGGGGAC CGTCTACGCCCAGCACCTGGCCTTCTTCAGCCGCTTCAGTGCCCGAGGCCCTGCCCATGCCCTCCACCCAGCTGC TAGCAGCAGCAGCAGCAGCAACTGCTCCCGGCCCAACGCCACCGCCTCTAGCTCCGGGCTCCCTGAGGTCCC CAGTGCCCTGCCCGGTCCCACGCTCCCACGCTGCCACCCTGTCCTGACTCGCCACCTGGTCTTGTGGGCAGACT GCTGATCGAGTTCACCTCACCCATGCCCCTGGAGCGGGTGCAGAGGGAGAACCCAGGCGTGCTCATGGGCGGCCG ATACACACCGCCCGACTGCACCCCAGCCCAGACGGTGGCGGTCATCATCCCCTTTAGACACCGGGAACACCACCT GCGCTACTGGCTCCACTATCTACACCCCATCTTGAGGCGGCAGCGGCTGCGCTACGGCGTCTATGTCATCAACCA GCATGGTGAGGACACCTTCAACCGGGCCAAGCTGCTTAACGTGGGCTTCCTAGAGGCGCTGAAGGAGGATGCCGC CTATGACTGCTTCATCTTCAGCGATGTGGACCTGGTCCCCATGGATGACCGCAACCTATACCGCTGCGGCGACCA ACCCCGCCACTTGCCATTGCCATGGACAAGTTTGGCTTCCGGCTTCCCTATGCTGGCTACTTTGGAGGTGTGTC AGGCCTGAGTAAGGCTCAGTTTCTGAGAATCAATGGCTTCCCCAATGAGTACTGGGGCTGGGGTGGCGAGGATGA TGACATCTTCAACCGGATCTCCCTGACTGGGATGAAGATCTCACGCCCAGACATCCGAATCGGCCGCTACCGCAT GATCAAGCACGACCGCGACAAGCATAACGAACCTAACCCTCAGAGGTTTACCAAGATTCAAAACACGAAGCTGAC CATGAAGCGGGACGGCATTGGGTCAGTGCGGTACCAGGTCTTGGAGGTGTCTCGGCAACCACTCTTCACCAATAT CACAGTGGACATTGGGCGGCCTCCGTGGCCCCCTCGGGGCTGACACTAATGGACAGAGGCTCTCGGTGCCGA $\tt CTCTGTTTTCCAAGGGTCTTCACTAGGCCCCCTAGCTACACCTGGAAGTTTCAGAACCCACTTTGGGGGGCCTCC$ TGCCTGGGCAGGCTCTTCAAGTGTGGCCCTCTTTGGAGTCAACCCTCCTTCCCGACCCCCTCCCCTAGCCCAGC TGTGCCTCAGTTTCCCCCCCTTGAGTCCCCTAGGGCCTGGAAGGGTGGGAGGTATGTCTAGGGGGCAGTGTCTCT GGGGGCAAGCTTTGGTGCGCCCCCTGCTGAGGAGCAGCCCCCAGGAGGGGACCAGAGGGGATGCTGTCGCTGCC TGGGATCTTGGGGTTGGCCTTTGCATGGGAGGCAGGTGGGGCTTGGATCAGTAAGTCTGGTTCCCGCCTCCCTGT CTGAGAGAGGAGGCCCCAGGGCCGGCTTGTGTTTGTACATTGCACAGAAACTTGTGTGGGTGCTTTAGT **AAAAAACGTGAATGG**

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FIGURE 200

MSRLLGGTLERVCKAVLLLCLLHFLVAVILYFDVYAQHLAFFSRFSARGPAHALHPAASSSSSSSNCSRPNATAS
SSGLPEVPSALPGPTAPTLPPCPDSPPGLVGRLLIEFTSPMPLERVQRENPGVLMGGRYTPPDCTPAQTVAVIIP
FRHREHHLRYWLHYLHPILRRQRLRYGVYVINQHGEDTFNRAKLLNVGFLEALKEDAAYDCFIFSDVDLVPMDDR
NLYRCGDQPRHFAIAMDKFGFRLPYAGYFGGVSGLSKAQFLRINGFPNEYWGWGGEDDDIFNRISLTGMKISRPD
IRIGRYRMIKHDRDKHNEPNPQRFTKIQNTKLTMKRDGIGSVRYQVLEVSRQPLFTNITVDIGRPPSWPPRG

214/6881 FIGURE 201

GCGGAGAAACAGTAGTTAGGATGGCTGAAGGGGATACTCACCGGCTGAAGGCCGACTGTGATTCCCCCTACCCCC ACAAGGCGATTTTGACCCCCTGAGGGCTGCTCTAGAGGACTCAGGCCCCGAAGCTGTCCCAGGGAGGTCCCCGCT GCATCCCACCCAAGCTGTGCCTCATGGAGTCGATGTTTAGCAGCCCTGCCGAGGCGCGCTGCAGCGAGAGA CCGGGGTGCCAGGACTGCTTACTCCTCTTCCGGACCTGGACGAGTGTACGAGCTGGACCGAGTCGCTGGATTTG CACGACTGGAGGAGACGACAGGGTCAAAGATGTTCATTCTGGGTGACACAGCCTACGGCAGCTGCTGCGTGGATG CACTGCCCGTTGCCTTCGTGCTCCAACGTTCTGTGGCCTTGGAGCCTCTGTGTCAAGGCCTTTGAGGCCCAGA ACCCAGACCCCAAAGCGCCTGTGGTGCTGAGTGAGCCGGCCTGTGCCCATGCCCTGGAGGCTTTGGCTACTC TCCTGCGCCCACGGTACCTGGACCTGCTAGTCTCCAGCCCAGCTTTTCCCCAACCAGTGGGTTCCCTGAGTCCAG AGCCTATGCCCCTAGAGCGTTTTGGGCGCCGCTTCCCCCTTGCCCCAGGGAGGCGTCTAGAAGAGTATGGTGCCT TCTATGTAGGGGGCTCTAAGGCCAGCCCTGACCCAGACCTTGACCCAGACCTGAGTCGGCTGCTCTTGGGGTGGG CACCAGGTCAACCCTTCTCCTCCTGCTGTCCAGATACAGGGAAGACTCAGGATGAGGGTGCCCGGGCTGGACGGC GTGTAGCCCAACACCGTGAGGCACTGGCCCACTTGCGGAACCTGACTCAGGCTGCTGGCAAGCGTAGCTATGTGT TGGCCCTGGGGGCGCCCACCCCTGCCAAGCTTGCCAACTTCCCTGAGGTGGATGTCTTTGTGCTATTAGCCTGTC CTCTGGGTGCTCTAGCCCCCCAGCTTTCTGGTAGCTTCTTCCAGCCTATACTGGCACCATGTGAGCTGGAAGCTG CCTTCCACGTGGCTCTCCCACCACCTGAGTCAGAGCTGTGGGAAACCCCAGACGTGTCACTCATTACTGGAGATC TCCGACCCCACCTGCCTGGAAGTCATCAAATGATCATGGAAGCTTGGCTCTGACCCCACGGCCCCAGCTGGAGC TGGCTGAGGCAGTCCTGCAGCCTCATTCCTTAGTTCCCGGAGCTGGCAAGGGCTGGAGCCCCGCCTGGGTCAGA CGCCAGTGACAGAAGCTGTGAGTGGAAGACGAGGGATTGCCATCGCCTATGAGGATGAGGGAAGCGGCTGATACC ATGTGGGGCTGGAGACATAGATGGACTTATGAATGGCTGCTAGGACCTTTAGTGCTCCCTGCACCAACCTCCCAT CCCCTGCCAAGATCCTTGAAGGACCCTGGAAGGAGGGAGAGCAGCCCTTCACAGGATAGGATCCGTCTCT GTCCTGTCCTGGCACTGGCACAAGCTCAGCCCATGCCCAGTAATGCGTGTTGTTTGGCTGATGGAATAAAGGGCT TAGGGACTTCCCTGAGGCCTCTGGACCCATCTGTCTTCCTGAGGGCAGCCCAGGACCTTTGGCCAATCCCAGTTC CCAGGCTGCAGTTGAGGGTCTGTCCTTGTCAAAAGGCAGGTGCTAGACAGTCTAGACCAGGGTTTCTCAAACTCG TACTTGACATTTGGGGCCAGATAATTCTTTGTTGTGGGGCTGTCTGGTGTATGGTAGGGTGCTCAGCAGCATCCC TGGCCTCTGCCCACTAGACATCAGAAGCACTCCCCCAGTTGTGACAACCAAAAATATCTCCAGACCTTGGCAAAT TTCAAGTGTTCAGACAGCCACATGAGGGGACAGTGCAGCTACAGGATATGCCATCATGGCAGAAAGTTCTGTTGG

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215/6881 FIGURE 202A

GCCTTCGCCTGCTGGAAAAGCAGTAGGATCGGCCAGTGGCGACAGCAGGAGCTGAGCCTAAGCCCTGGCGGGGCT TTGGGCTGTAGATTCCTGTCTGACTAAAGGGACCTCAAAAAGGAGGGAAAATGCTTCTGAGTCTGAAACTCTGA ATCCCAGTGCTAGGATAATGACCTTTTATCCAACTATGGAAGAGTTCCGAAACTTCAGTAGATACATTGCCTACA TTGAATCCCAAGGAGCTCATCGGGCAGGGCTAGCCAAGGTTGTTCCTCCAAAAGAGTGGAAGCCACGAGCATCCT ATGATGACATTGATGATTTGGTCATTCCTGCCCCCATTCAACAGCTGGTGACGGGGCAGTCTGGCCTCTTTACTC AGTACAACATACAGAAGAAAGCCATGACTGTTCGAGAGTTCCGCAAGATAGCCAATAGCGATAAGTACTGTACCC CACGCTATAGTGAGTTTGAAGAGCTCGAGCGGAAATACTGGAAAAATCTTACATTCAATCCTCCAATCTATGGTG CAGATGTGAATGGTACCCTCTATGAAAAGCATGTTGATGAGTGGAATATTGGCCGGCTGAGAACAATCCTGGACT TGGTGGAAAAGGAGTGGGATCACCATTGAGGGTGTGAACACCCCATACCTGTACTTTGGCATGTGGAAGACAT CCTTTGCTTGGCACACTGAAGACATGGACCTCTACAGCATCAACTACCTGCACTTTGGAGAACCAAAGTCCTGGT ACTCTGTTCCACCTGAGCATGGAAAGCGGTTGGAACGCCTCGCCAAAGGCTTTTTCCCAGGAAGTGCTCAAAGCT GTGAGGCATTTCTCCGCCACAAGATGACCCTGATTTCCCCGTTAATGCTGAAGAAATATGGAATTCCCTTTGACA AGGTGACTCAAGAGGCTGGAGAGTTTATGATCACTTTCCCTTATGGTTACCATGCCGGCTTTAACCATGGTTTTA ACTGTGCGGAGTCTACCAATTTTGCTACCCGTCGGTGGATTGAGTACGGCAAGCAGCTGTGCTGTGCTCCTGTA CTGGGAAGGACAACACAGTTATTGACCATACTCTGCCCACGCCAGAAGCAGCTGAGTTTCTTAAGGAGAGTGAAC ACCTGAAGACAAGCCTGGCCAAGCACCGAATAGGGACAAAGAGGCACCGAGTTTGTCTTGAAATACCACAGGAGG TGAGTCAGAGTGAGCTCTTCCCCAAGGAGGATCTGAGTTCTGAGCAGTATGAGATGACGGAGTGCCCGGCAGCCC TCGCCCCTGTGAGGCCCACCCATAGCTCTGTGCGGCAAGTTGAGGATGGTCTTACCTTCCCAGATTATTCTGACT CCACTGAAGTCAAATTTGAAGAGCTTAAAAATGTCAAACTAGAAGAGGAGGAGGAGGAGGAGGAGAACAAGAAGCAG $\tt CTGCCTTGGATCTTCTGTGAATCCTGCGTCTGTAGGGGGGACGCCTTGTCTTCTCAGGCTCCAAAAAGAAATCAT$ CTTCTAGCCTGGGCTCTGGCTCTTCACGGGATTCTATCTCTTCTGATTCAGAAACTAGTGAGCCTCTCTCCTGCC GAGCCCAAGGGCAAACGGGAGTTCTCACTGTGCACAGTTATGCCAAAGGGGATGGCAGGGTCACTGTGGGAGAGC CATGCACGAGGAAGAAGGAAGCGCCGCTAGAAGTTTCAGTGAGCGGGAGCTGGCAGAGGTTGCAGATGAATACA TTGTGCTGCAGGAGTGTGATGATGAGGACATCTGAACAGCTGACCCCTGAGGAAGAGGCTGAGGAGACAG AGGCCTGGGCCAAGCCTCTGAGCCAACTGTGGCAGAACCGACCTCCAAACTTTGAGGCTGAGAAGGAATTCAATG AGACCATGGCCCAACAGGCCCCTCACTGCGCTGTCTGTATGATCTTCCAGACTTATCATCAGGTTGAATTTGGAG GCTTTAATCAGAACTGTGGAAATGCTTCAGATTTAGCCCCCCAGAAGCAGAGGACCAAGCCATTGATTCCAGAAA TGTGCTTCACTTCGACTGGCTGCAGCACGGACATCAACCTTTCTACTCCTTATCTTGAGGAGGATGGCACCAGCA TACTCGTTTCCTGCAAGAAGTGCAGCGTCCGGGTCCATGCCAGTTGCTATGGGGTCCCCCCTGCAAAGGCTTCTG AAGACTGGATGTTCTCGGTGTTCAGCCAATGCCCTAGAGGAGGACTGCTGTTTATGCTCATTACGAGGAGGGG CCCTGCAGAGAGCAAATGATGACAGGTGGGTCCACGTTTCATGTGCTGTGGCAATTCTGGAAGCAAGGTTTGTCA ACATTGCAGAAAGAAGTCCGGTGGATGTGAGCAAAATCCCCCTGCCCCGCTTCAAACTGAAATGTATCTTCTGTA AGAAGCGGAGGAAAAGAACTGCTGGCTGCTGTGTGCAGTGTTCTCACGGCCGCTGCCCAACTGCCTTCCATGTGA GCTGCGCCCAGGCTGCCGGTGTGATGATGCAGCCTGACGACTGGCCTTTTGTGGTCTTCATTACCTGCTTTTCGGC ACAAGATTCCTAATTTGGAGCGTGCCAAGGGGGCCTTGCAAAGCATCACTGCAGGCCAGAAAGTCATTAGCAAGC ATAAGAACGGCCCTTCTACCAGTGTGAAGTGGTCAGGCTCACCACCGAGACCTTCTATGAAGTCAACTTTGATG ATGGCTCCTTCAGCGACAATCTTTATCCTGAGGACATAGTGAGCCAGGACTGTCTCCAGTTTGGTCCTCCTGCTG AAGGGGAAGTGGTCCAAGTGAGATGGACAGACGCCAAGTCTATGGAGCCAAGTTTGTGGCCTCCCACCCTATCC AAATGTACCAGGTGGAGTTTGAGGATGGCTCACAACTTGTGGTTAAGAGAGATGATGTATACACACTGGATGAAG AGCTTCCCAAGAGAGTCAAATCTAGACTGTCAGTAGCCTCAGACATGCGCTTCAATGAGATTTTCACAGAGAAAG AGGTTAAGCAAGAAAAGAAACGGCAACGAGTTATCAACTCAAGATACCGGGAAGATTATATTGAGCCTGCACTAT ACCGGGCCATCATGGAGTAGGTGCTTCCAGGGTCCAAGGGATTCTCAGCCATCCAGGCAAGAGCACTCTGGGTTC CACAGCACAGCAGACATGGAACGCTGAAGTCTCTGAAAGTGAAGTTGTAAAAAGAAAAGGAATGAAATAACCGAC CCATCATCTTCTCACCCACCCTCATTGCATTCCGCTGTAGTGAAAGGACGAGCCATTTCTGGGCACGTGGCAGCA GTCGCTGATCTCCCAGCTGAGGGGCTGAGCACTGGAATGCTGTGGCTGCACTGGCCCCAGTCCATAGAGGGGTCA

FIGURE 202B

MASESETLNPSARIMTFYPTMEEFRNFSRYIAYIESQGAHRAGLAKVVPPKEWKPRASYDDIDDLVIPAPIQQLV
TGQSGLFTQYNIQKKAMTVREFRKIANSDKYCTPRYSEFEELERKYWKNLTFNPPIYGADVNGTLYEKHVDEWNI
GRLRTILDLVEKESGITIEGVNTPYLYFGMWKTSFAWHTEDMDLYSINYLHFGEPKSWYSVPPEHGKRLERLAKG
FFPGSAQSCEAFLRHKMTLISPLMLKKYGIPFDKVTQEAGEFMITFPYGYHAGFNHGFNCAESTNFATRRWIEYG
KQAVLCSCRKDMVKISMDVFVRKFQPERYKLWKAGKDNTVIDHTLPTPEAAEFLKESELPPRAGNEEECPEEDME
GVEDGEEGDLKTSLAKHRIGTKRHRVCLEIPQEVSQSELFPKEDLSSEQYEMTECPAALAPVRPTHSSVRQVEDG
LTFPDYSDSTEVKFEELKNVKLEEEDEEEEQEAAALDLSVNPASVGGRLVFSGSKKKSSSSLGSGSSRDSISSDS
ETSEPLSCRAQGQTGVLTVHSYAKGDGRVTVGEPCTRKKGSAARSFSERELAEVADEYMFSLEENKKSKGRRQPL
SKLPRHHPLVLQECVSDDETSEQLTPEEEAEETEAWAKPLSQLWQNRPPNFEAEKEFNETMAQQAPHCAVCMIFQ
TYHQVEFGGFNQNCGNASDLAPQKQRTKPLIPEMCFTSTGCSTDINLSTPYLEEDGTSILVSCKKCSVRVHASCY
GVPPAKASEDWMCSRCSANALEEDCCLCSLRGGALQRANDDRWVHVSCAVAILEARFVNIAERSPVDVSKIPLPR
FKLKCIFCKKRRKTAGCCVQCSHGRCPTAFHVSCAQAAGVMMQPDDWPFVVFITCFRHKIPNLERAKGALQSIT
AGQKVISKHKNGRFYQCEVVRLTTETFYEVNFDDGSFSDNLYPEDIVSQDCLQFGPPAEGEVVQVRWTDGQVYGA
KFVASHPIQMYQVEFEDGSQLVVKRDDVYTLDEELPKRVKSRLSVASDMRFNEIFTEKEVKQEKKRQRVINSRYR

AGTTACAGACAGCTGACCATGGAAGCGAATGGGTTGGGACCTCAGGGTTTTCCGGAGCTGAAGAATGACACATTC $\verb|CTGCGAGCCTGGGGAGAGGAAACAGACTACACTCCCGTTTGGTGCATGCGCCAGGCCGGTCACTTACCA| \\$ GAGTTTAGGGAAACCCGGGCTGCCCAGGACTTTTTCAGCACGTGTCGCTCTCCTGAGGCCTGCTGTGAACTGACT CTGCAGCCACTGCGTCGCTTCCCTCTGGATGCTGCCATCATTTTCTCCGACATCCTTGTTGTACCCCAGGCACTG GGCATGGAGGTGACCATGGTACCTGGCAAAGGACCCAGCTTCCCAGAGCCATTAAGAGAAGAGCAGGACCTAGAA CGCCTACGGGATCCAGAAGTGGTAGCCTCTGAGCTAGGCTATGTGTTCCAAGCCATCACCCTTACCCGACAACGA GGCTCAAGCACCATGGCTCAGGCCAAGCGCTGGCTCTATCAGAGACCTCAGGCTAGTCACCAGCTGCTTCGCATC CTCACTGATGCTCTGGTCCCATATCTGGTAGGACAAGTGGTGGCTGGTGCCCAGGCATTGCAGCTGTTTGAGTCC AAGGCCAGGTTGCGGGAGGCAGGCCTGGCACCAGTGCCCATGATCATCTTTGCTAAGGATGGGCATTTTGCCCTG GTGGGGAAGACGGTGACATTGCAGGGCAACCTGGACCCCTGTGCCTTGTATGCATCTGAGGAGGAGATCGGGCAG TTGGTGAAGCAGATGCTGGATGACTTTGGACCACATCGCTACATTGCCAACCTGGGCCATGGGCTTTATCCTGAC ATGGACCCAGAACATGTGGGCGCCTTTGTGGATGCTGTGCATAAACACTCACGTCTGCTTCGACAGAAC<u>TGA</u>GTG TATTGTGTAGTTTTGTTGTGAAAGATTGTGCCCATATCCTCAGTTCTTTAGCCTCTGCTCCTTCCCTGGGAA CCCTCTCTATATCCTCTT

MEANGLGPQGFPELKNDTFLRAAWGEETDYTPVWCMRQAGRYLPEFRETRAAQDFFSTCRSPEACCELTLQPLRR FPLDAAIIFSDILVVPQALGMEVTMVPGKGPSFPEPLREEQDLERLRDPEVVASELGYVFQAITLTRQRLAGRVP LIGFAGAPWTLMTYMVEGGGSSTMAQAKRWLYQRPQASHQLLRILTDALVPYLVGQVVAGAQALQLFESHAGHLG PQLFNKFALPYIRDVAKQVKARLREAGLAPVPMIIFAKDGHFALEELAQAGYEVVGLDWTVAPKKARECVGKTVT LQGNLDPCALYASEEEIGQLVKQMLDDFGPHRYIANLGHGLYPDMDPEHVGAFVDAVHKHSRLLRQN

AGCTTTGCGCAGTGGCAGTATCGTAGCCAATGAGGTTTATCCGAGGCGCGATTATTGCTAATTGAAAACTTTTCC CANTACCCCGCCATGACGACTTGAAATATAGTCGGCATTGGCAATTTTTGACAGTCTCTACGGAGACTGCATGTG TTCACCACTGTACTGAGTGACCAACAGGTGGTGGAGCTGATCCCTGGGGGTGCAGGCATCGTCGTGGGATATGGG GACCGTTCTCGTTTCATCCAACTGGTCCAGAAGGCACGGCTAGAGGAGCAAGGAGCAGGTGGCAGCTATGCAG GCAGGTCTGCTGAAGGTGGTACCACAGGCTGTGCTGGACTTGCTGACCTGGCAAGAGTTGGAGAAGAAAGTGTGT GGGGATCCAGAGGTCACTGTGGATGCTCTGCGCAAGCTCACCCGGTTTGAGGACTTCGAGCCATCTGACTCGCGG GTGCAGTATTTCTGGGAGGCACTGAACAACTTCACCAACGAGGACCGGAGCCGCTTCCTGCGCTTTTGTCACGGGC CGCAGTCGCCTGCCAGCACGGATCTACATCTACCCAGACAAGCTGGGCTACGAGACCACAGACGCGCTGCCCGAG TCTTCCACTTGCTCCAGCACCCTCTTCCTGCCACACTATGCCAGTGCCAAGGTATGCGAGGAGAAGCTCCGCTAT GCGGCCTACAACTGCGTGGCCATCGACACTGACATGAGCCCTTGGGAGGAGTGAGGCGTGCCGCCGGCTGTGGGA CCAGCAAGACTGCACGTGTCCCTCTTGGCCTTGCCCAGGGCGAAGACACCTTCCCTGCCCTGGTTTGGCTGACGT GCTCAGCAAAACCCCATGTGCCCTGCTCCTGTGTGCAGTTGGGGTAGGGGCAGCTGGCATGGTCAGGTAACACTA GGAATCTTCCACAAGCCCAGCACAAGCTGCCAGGCCTGAGCTACTTGAAGGGGGCCATCTAGGTCCCCAACCCAT GGACTTTGCCTCCATTTTCAGCTCCGCCTTTTTTCTCCTATTTTCTCTCTGGCTTTCTTCAGCCATGACTCACAA CTAAAAACATAAAACACTGGAGGTTAGTGGAGGCCCCTCCCCAAGCAGGAGCCTGGGATGGGCAGGGAGTGATA GCCAAACTCCTTGGTCACCTGCTCCAAGAAGGAAGCAGTAGCTGAGCACCTGCCCTCACATACTGCTCTTTTCCC CTTCCCTGACTCAGAACCCACACCCACTCAATGTGAACTCTACTACCACGACCTCCCCATATTCCTCACTTCTCC ATCACCTCCAGCCTGACTCCCTGTCTGCCCTTTCACCCCCAAGATTTTGCACAGGTTAAGGCCAGTTATGGCCTT TTTGAAATCTGTAATAGCTCCCCTTTCCCCAACTCTAAAGCCTAGACCTTAAACCTGTTCCTAGAGCTATGCACA CCCCTGCCCCAGTTTACCGTTCCTCCCTCAGGGCCTCCGTGACACTCCATGAAAAGAAGTTCTTGCATACCGGAA AGTTGAATAAATGGATGAATTCAAAAAAAAAAAAAAAA

FIGURE 207

MEGMDKETFEFKFGKELTFTTVLSDQQVVELIPGGAGIVVGYGDRSRFIQLVQKARLEESKEQVAAMQAGLLKVV PQAVLDLLTWQELEKKVCGDPEVTVDALRKLTRFEDFEPSDSRVQYFWEALNNFTNEDRSRFLRFVTGRSRLPAR IYIYPDKLGYETTDALPESSTCSSTLFLPHYASAKVCEEKLRYAAYNCVAIDTDMSPWEE

223/6881 FIGURE 209

 ${\tt MVRMNALADALKSINNAEKRGKRQVLLRPCSKVIVQFLTVMMKHGYIGEFEITDDHRAGKIVVNLTGRLNKCGAI} \\ {\tt SPRFDVQLKDLEKWQNNLLPSRQFDFIVLTTSAGIMDHEARRKHTGGKIQGFFF}$

224/6881 FIGURE 210

FIGURE 211

MGISRDNWHKRRKTGGKRKPYHKKRKYELGRPAANTKIGPRRIHTVRVRGGNKKYRALRLDVGNFSWGSECCTRK TRIIDVVYNASNNELVRTKTLVKNCIVLIDSTPYRQWYESHYALPLGRKKGAKLTPEEEEILNKKRSKKIQKKYD ERKKNAKISSLLEEQFQQGKLLACIASRPGQCGRADGYVLEGKELEFYLRKIKARKGK

226/6881 FIGURE 212

ACGCTTGCGCGCGGATTTAAACTGCGGCGGTTTACGCGGCGTTAAGACTTCGTAGGGTTAGCGAAATTGAGGTT TCTTGGTATTGCGCGTTTCTCTTCCTTGCTGACTCTCCGAATGGCCATGGACTCGTCGCTTCAGGCCCGCCTGTT TCCCGGTCTCGCTATCAAGATCCAACGCAGTAATGGTTTAATTCACAGTGCCAATGTAAGGACTGTGAACTTGGA TGCAATAAACCCAGAACTCTTACAGCTTCTTCCCTTACATCCGAAGGACAATCTGCCCTTGCAGGAAAATGTAAC AAACTCCCGCAAGCAGTTTTCAGTTCCTCCTGCCCCACTAGGCCTTCCTGCCCTGCAGTGGCTGAAATACCATT GAGGATGGTCAGCGAGGAGATGGAAGAGCAAGTCCATTCCATCCGAGGCAGCTCTTCTGCAAACCCTGTGAACTC AGTTCGGAGGAAATCATGTCTTGTGAAGGAAGTGGAAAAAATGAAGAACAAGCGAGAAGAAGAAGAAGACCCAGAA CTCTGAAATGAGAATGAAGAGAGCTCAGGAGTATGACAGTAGTTTTCCAAACTGGGAATTTGCCCGAATGATTAA AGAATTTCGGGCTACTTTGGAATGTCATCCACTTACTATGACTGATCCTATCGAAGAGCACAGAATATGTGTCTG TCTCCTCTTGGTACATGAACCCAAGTTGAAAGTGGACTTAACAAAGTATCTGGAGAACCAAGCATTCTGCTTTGA CTTTGCATTTGATGAAACAGCTTCGAATGAAGTTGTCTACAGGTTCACAGCAAGGCCACTGGTACAGACAATCTT TGAAGGTGGAAAAGCAACTTGTTTTGCATATGGCCAGACAGGAAGTGGCAAGACACATACTATGGGCGGAGACCT CTCTGGGAAAGCCCAGAATGCATCCAAAGGGATCTATGCCATGGCCTCCCGGGACGTCTTCCTCCTGAAGAATCA ACCCTGCTACCGGAAGTTGGGCCTGGAAGTCTATGTGACATTCTTCGAGATCTACAATGGGAAGCTGTTTGACCT TCTGGTTAACTCTGCTGATGATGTCATCAAGATGATCGACATGGGCAGCCCTGCAGAACCTCTGGGCAGACATT TGCCAACTCCAATTCCTCCCGCTCCCACGCGTGCTTCCAAATTATTCTTCGAGCTAAAGGGAGAATGCATGGCAA GTTCTCTTTGGTAGATCTGGCAGGGAATGAGCGAGGCGGGGACACTTCCAGTGCTGACCGGCAGACCCGCATGGA GGGCGCAGAAATCAACAAGAGTCTCTTAGCCCTGAAGGAGTGCATCAGGGCCCTGGGACAGAACAAGGCTCACAC CCCGTTCCGTGAGAGCAAGCTGACACAGGTGCTGAGGGACTCCTTCATTGGGGAGAACTCTAGGACTTGCAGATT GCCACGATCTCACCAGGCATAAGCTCCTGTGAATATACTTTAAACACCCTGAGATATGCAGACAGGGTCAAGGAG CTGAGCCCCCACAGTGGGCCCAGTGGAGAGCAGTTGATTCAAATGGAAACAGAAGAGATGGAAGCCTGCTCTAAC GGGGCGCTGATTCCAGGCAATTTATCCAAGGAAGAGGAGGAACTGTCTTCCCAGATGTCCAGCTTTAACGAAGCC ATGACTCAGATCAGGGAGCTGGAGGAGAAGGCTATGGAAGAGCTCAAGGAGATCATACAGCAAGGACCAGACTGG CTTGAGCTCTCTGAGATGACCGAGCCAGACTATGACCTGGAGACCTTTGTGAACAAAGCGGAATCTGCTCTG GCCCAGCAAGCCAAGCATTTCTCAGCCCTGCGAGATGTCATCAAGGCCTTGCGCCTGGCCATGCAGCTGGAAGAG CAGGCTAGCAGACAAATAAGCAGCAAGAAACGGCCCCAGTGACGACTGCAAATAAAAATCTGTTTGGTTTGACAC CCAGCCTCTTCCCTGGCCCTCCCCAGAGAACTTTGGGTACCTGGTGGGTCTAGGCAGGGTCTGAGCTGGGACAGG TTCTGGTAAATGCCAAGTATGGGGGCATCTGGGCCCAGGGCAGCTGGGGAGGGGGTCAGAGTGACATGGGACACT CTCCCTGGGGTTGTCCTGGGTGGGAGAGAGAGAGACCTTTAGTACAGCTATCTGCTGGCTCTAAACCTTCT ACGCCTTTGGGCCGAGCACTGAATGTCTTGTACTTTAAAAAAATGTTTCTGAGACCTCTTTCTACTTTACTGTCT AAATAAA

227/6881. FIGURE 213A

GGGGTCGGTGGCTTAGGGAGCCCGTCCGGCCATGGTGGCCGCGGTGGTGGTTGGCGCGGCTGCGCTGCGCCCCG GGGCAGTGCGGAGCCGGGACAGTCGCGGCGCTGACGCCCGGGGCCCCAGCTGCAGATATGAAGCGGAGCCGCTG CCGCGACCGACCGCCGCCGCCGACCGCCGGGAGGATGGAGTTCAGCGGGCAGCGGAGCTGTCTCAGTC TTTGCCGCCGCGCGGGGGCCCCGGGAGGCAGCGGCTGGAGGAGCGGACGGCCCCGCGGGGCCCGAGGG CAAGGAGCAGGATGTAGCTGGAGTTAGCCCCTGCCCTCTCAGGAAACTCAGTAATCCTGACATATTTTCATC CACTGGAAAAGTTAAACTTCAGCGACAACTGAGTCAGGATGATTGTAAGTTATGGAGAGGAAACCTGGCCAGCTC TCTATCGGGTAAGCAGCTGCTCCCTTTGTCCAGCAGTGTACATAGCAGTGTGGGACAGGTGACTTGGCAGTCGTC AGGAGAAGCATCAAACCTGGTTCGAATGAGAAACCAGTCCCTTGGACAGTCTGCACCTTCTCTTACTGCTGGCCT GAAGGAGTTGAGCCTTCCAAGAAGAGGCAGCTTTTGTCGGACAAGTAACCGCAAGAGCTTGATTGTGACCTCTAG CACATCACCTACACTACCACGGCCACACTCACCACTCCATGGCCACACAGGTAACAGTCCTTTGGACAGCCCCCG GAATTTCTCTCCAAATGCACCTGCTCACTTTTCTTTTGTTCCTGCCCGTAGGACTGATGGGCCGCGCTGGTCTTT GGCCTCTTTGCCCTCTTCAGGATATGGAACTAACACTCCTAGCTCCACTGTCTCATCATCATCCTCACAGGA AAAGCTGCATCAGTTGCCTTTCCAGCCTACAGCTGATGAGCTGCACTTTTTGACGAAGCATTTCAGCACAGAGAG CGTACCAGATGAGGAAGGACGCCAGTCCCCAGCCATGCGGCCTCCCGGAGCCTCAGTCCCGGACGATCCCC GGAAGAGCGACTAGCAGAGTTTATTTCCTCCAACACTCCAGACAGCGTGCTGCCCTTGGCAGATGGAGCCCTGAG CTTTATTCATCAGGTGATTGAGATGGCCCGAGACTGCCTGGATAAATCTCGGAGTGGCCTCATTACATCACA ATACTTCTACGAACTTCAAGATAATTTGGAGAAACTTTTACAAGATGCTCATGAGCGCTCAGAGAGCTCAGAAGT GTTTGACCCTGAAGAGTTCTACCACCTTTTAGAAGCAGCTGAGGGCCACGCCAAAGAGGGACAAGGGATTAAATG TGACATTCCCCGCTACATCGTTAGCCAGCTGGGCCTCACCCGGGATCCCCTAGAAGAAATGGCCCAGTTGAGCAG CTGTGACAGTCCTGACACTCCAGAGACAGATGATTCTATTGAGGGCCATGGGGCATCTCTGCCATCTAAAAAAGAC ACCCTCTGAAGAGGACTTCGAGACCATTAAGCTCATCAGCAATGGCGCCTATGGGGCTGTATTTCTGGTGCGGCA CAAGTCCACCCGGCAGCGCTTTGCCATGAAGAAGATCAACAAGCAGAACCTGATCCTACGGAACCAGATCCAGCA GGCCTTCGTGGAGCGTGACATACTGACTTTCGCTGAGAACCCCTTTGTGGTCAGCATGTTCTGCTCCTTTGATAC CAAGCGCCACTTGTGCATGGTGATGGAGTACGTTGAAGGGGGGAGACTGTGCCACTCTGCTGAAGAATATTGGGGC CCTGCCTGTGGACATGGTGCGTCTATACTTTGCGGAAACTGTGCTGGCCCTGGAGTACTTACACAACTATGGCAT CGTGCACCGTGACCTCAAGCCTGACAACCTCCTAATTACATCCATGGGGCACATCAAGCTCACGGACTTTGGACT GTCCAAAATTGGCCTCATGAGTCTGACAACGAACTTGTATGAGGGTCATATTGAAAAGGATGCCCGGGAATTCCT GGACAAGCAGGTATGCGGGACCCCAGAATACATTGCGCCTGAGGTGATCCTGCGCCAGGGCTATGGGAAGCCAGT GGACTGGTGGGCCATGGGCATTATCCTGTATGAGTTCCTGGTGGGCTGCGTCCCTTTTTTTGGAGATACTCCGGA GGAGCTCTTTGGGCAGGTGATCAGTGATGAGATTGTGTGGCCTGAGGGTGATGAGGCACTGCCCCCAGACGCCCA GGACCTCACCTCCAAACTGCTCCACCAGAACCCTCTGGAGAGACTTGGCACAGGCAGTGCCTATGAGGTGAAGCA GCACCCATTCTTTACTGGTCTGGACTGGACAGGACTTCTCCGCCAGAAGGCTGAATTTATTCCTCAGTTGGAGTC AGAGGATGATACTAGCTATTTTGACACCCGCTCAGAGCGATACCACCACATGGACTCGGAGGATGAGGAAGAAGT GAGTGAGGATGCCTTGAGATCCGCCAGTTCTCTTCCTGCTCTCCAAGGTTCAACAAGGTGTACAGCAGCAT CCATTCAGATGGCCTGGCAGGGCTCAAAGGCCGAGACCGGAGCTGGGTGATTGGCTCCCCTGAGATATTACGGAA GCGGCTGTCGGTGTCTGAGTCATCCCACACAGAGAGTGACTCAAGCCCTCCAATGACAGTGCGACGCCGCTGCTC AGGCCTCCTGGATGCGCCTCGGTTCCCGGAGGGCCCTGAGGAGGCCAGCACCCTCAGGAGGCAACCACAGGA GGGTÄTATGGGTCCTGACACCCCCATCTGGAGAGGGGGTATCTGGGCCTGTCACTGAACACTCAGGGGAGCAGCG GCCAAAGCTGGATGAGGAAGCTGTTGGCCGGAGCAGTGGTTCCAGTCCAGCTATGGAGACCCGAGGCCGTGGGAC $\tt CTCACAGCTGGCTGAGGGAGCCACAGCCAAGGCCATCAGTGACCTGGCTGTGCGTAGGGCCCGCCACCGGCTGCT$ CTCTGGGGACTCAACAGAGAAGCGCACTGCTCGCCCTGTCAACAAGTGATCAAGTCCGCCTCAGCCACAGCCCT CTCACTCCTCATTCCTTCGGAACACCACACCTGCTCCCCGTTGGCCAGCCCCATGTCCCCACATTCTCAGTCGTC CAACCCATCATCCCGGGACTCTTCTCCAAGCAGGGACTTCTTGCCAGCCCTTGGCAGCATGAGGCCTCCCATCAT

FIGURE 213B

CATCCACCGAGCTGCCAAGAAGTATGGCTTCACCCTGCGGGCCATTCGCGTCTACATGGGTGACTCCGATGTCTA CACCGTGCACCATATGGTGTGGCACGTGGAGGATGGAGGTCCGGCCAGTGAGGCAGGGCTTCGTCAAGGTGACCT CATCACCCATGTCAATGGGGAACCTGTGCATGGCCTGGTGCACACGGAGGTGGTAGAGCTGATCCTGAAGAGTGG AAACAAGGTGGCCATTTCAACAACTCCCCTGGAGAACACATCCATTAAAGTGGGGCCAGCTCGGAAGGGCAGCTA CAAGGCCAAGATGGCCCGAAGGAGCAAGAGGAGCCGCGGCAAGGATGGGCAAGAAAAGCAGAAAAAGGAGCTCCCT GTTCCGCAAGATCACCAAGCAAGCATCCCTGCTCCACACCAGCCGCAGCCTTTCTTCCCCTTAACCGCTCCTTGTC GGTGACCCCCGATGCTGCATTCAGTGGGAGGGAATTCATCACAGAGCAGCTCCCCCAGCTCCAGCGTGCCCAG TTCCCCAGCCGGCTCTGGGCACACGGCCCAGCTCCCTCCACGGTCTGGCACCCAAGCTCCAACGCCAGTACCG CTCTCCACGGCGCAAGTCAGCAGCATCCCACTGTCACCACTGGCCCACACCCCTTCTCCCCCACCCCAAC AGCTTCACCTCAGCGGTCCCCATCGCCCCTGTCTGGCCATGTAGCCCAGGCCTTTCCCACAAAGCTTCACTTGTC ACCTCCCTGGGCAGGCAACTCTCACGGCCCAAGAGTGCGGAGCCACCCCGTTCACCACTACTCAAGAGGGTGCA GTCGGCTGAGAAACTGGCAGCAGCACTTGCCGCCTCTGAGAAGAAGCTAGCCACTTCTCGCAAGCACAGCCTTGA CCTGCCCCACTCTGAACTAAAGAAGGAACTGCCGCCCAGGGAAGTGAGCCCTCTGGAGGTAGTTGGAGCCAGGAG TGTGCTGTCTGGCAAGGGGGCCCTGCCAGGGAAGGGGGTGCTGCAGCCTGCTCCCTCACGGGCCCTAGGCACCCT CCGGCAGGACCGAACGACGAGTCGCTGCAGAAGCAAGAAGCCATTCGTGAGGTGGACTCCTCAGAGGA. CGACACCGAGGAAGGGCCTGAGAACAGCCAGGGTGCACAGGAGCTGAGCTTGGCACCTCACCCAGAAGTGAGCCA GAGTGTGGCCCCTAAAGGAGCAGGAGAGAGTGGGGAAGAGGATCCTTTCCCGTCCAGAGACCCTAGGAGCCTGGG CCCAATGGTCCCAAGCCTATTGACAGGGATCACACTGGGGCCTCCCAGAATGGAAAGTCCCAGTGGTCCCCACAG GAGGCTCGGGAGCCCACAAGCCATTGAGGAGGCTGCCAGCTCCTCCAGCAGGCCCCAACCTAGGTCAGTCTGG AGCCACAGACCCCATCCCTGAAGGTTGCTGGAAGGCCCAGCACCTCCACACCCAGGCACTAACAGCACTTTC TCCCAGCACTTCGGGACTCACCCCACCAGCAGTTGCTCTCCCCAGCTCCACCTCTGGGAAGCTGAGCATGTG GTCCTGGAAATCCCTTATTGAGGGCCCAGACAGGGCATCCCCAAGCAGAAAGGCAACCATGGCAGGTGGGCTAGC TGCACAAGCAGTGAAAGAGGATCCAGCCCTGAGCATCACCCAAGTGCCTGATGCCTCAGGTGACAGAAGGCAGGA CGTTCCATGCCGAGGCTGCCCCTCACCCAGAAGTCTGAGCCCAGCCTCAGGAGGGGCCAAGAACCAGGGGGCCA TCAAAAGCATCGGGATTTGGCATTGGTTCCAGATGAGCTTTTTAAAGCAAACATAGCAGTTGTTTGCCATTTCTTG CACTCAGACCTGTGTAATATATGCTCCTGGAAACC

229/6881 FIGURE 214

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 ${\tt MVGEKVEKPDAKEKKPKAKKADVGGKVKKGNLKAKKPKKGKPHCSRNPVLVRGIGRYCRSAMYSRKAMYKRKYSAAKSKVEKKKKEKVLATVTKPVGCDKNGGARVVKLRKMPRYYPTEDVPRKLLSHGKKSFSQHVRP}$

231/6881 FIGURE 216

AATCTGCCATTTTCTGTCCCTGAGTGAGTCTCTGGCGTCCCAAATTGCCTGTTTTTCTCGCAGGCTCTATTCCGT TCGCTGGTTCGCCACCTCAGGGGAACGATGGCCATGGAGTCCACAGCCACTGCCGCCGCGCGGGAGCTGGTT TCTGCCGACAAAATTGAAGATGTTCCTGCTCCTTCTACATCTGCAGATAAAGTGGAGAGTCTGGATGTGGATAGT GAAGCTAAGAAACTATTGGGTTTAGGACAGAAACATCTGGTGATGGGGGGATATTCCAGCAGCTGTCAATGCATTC CAGGAAGCAGCTAGTCTTTTAGGTAAGAAGTATGGAGAGACAGCTAATGAGTGTGGAGAAGCCTTCTTTTCTAT GGGAAATCACTTCTGGAGTTGGCAAGAATGGAGAATGGTGTGTTGGGAAACGCCTTGGAAGGTGTGCATGTGGAA GAGGAAGAAGAAAAAAACAGAAGATGAATCTCTGGTAGAAAATAATGATAACATAGATGAGGAAGCAAGGGAA AAGCCTGAAACTGATAAAGAACAGGACAGTGAAATGGAGAAGGGTGGAAGAGAGATATGGATATAAGTAAATCT GCAGAGGAGCCACAGGAAAAAGTTGACTTGACTCTAGATTGGTTAACTGAAACCTCTGAAGAGGCAAAAAGGAGGA GCAGCACCAGAAGGACCGAATGAAGCTGAGGTCACTTCTGGGAAGCCAGAACAGGAAGTACCAGATGCTGAGGAA GAAAAATCAGTTTCTGGAACTGATGTCCAAGAAGAGTGCAGAGAAAAAGGAGGTCAGGAGAAGCAGGGAGAGGTA ATTGTGAGCATAGAGGAGAGCCAAAAGAAGTTTCAGAAGAGCAGCCTGTGGTGACTCTAGAAAAGCAGGGCACT AAGGTAGTTACCTCTGAAAACGAGGCAGGAAAGGCGGTTCTTGAACAACTGGTAGGTCAAGAAGTACCACCTGCT GAAGAGTCACCAGAGGTGACAACAGAGGCTGCAGAGGCCTCAGCTGTAGAGGCTGGATCAGAAGTCTCTGAAAAG CCTGGGCAGGAGGCTCCAGTTCTCCCTAAGGATGGTGCAGTCAATGGACCGTCAGTTGTAGGAGATCAGACTCCT ATTGAACCACAGACTTCTATAGAAAGACTGACAGAAACAAAAGATGGCTCAGGACTAGAGGAGAAGGTCAGGGCA AAGCTGGTTCCTAGTCAGGAGGAGACTAAGCTGTCTGTAGAAGAGTCTGAGGCAGCTGGAGATGGGGTTGATACC AAGGTAGCCCAGGGAGCTACTGAGAAATCACCTGAAGACAAAGTTCAGATAGCTGCTAATGAAGAGACACAAGAG AGAGAAGAACAGATGAAAGAGGGTGAAGAAACTGAAGGCTCAGAAGAGGATGATAAAGAAAATGATAAGACCGAA GAAATGCCAAATGATTCAGTCCTTGAAAACAAGTCTCTTCAAGAAAATGAGGAGGAGGAGATTGGGAACCTAGAG CTTGCCTGGGATATGCTGGATTTAGCAAAGATCATTTTTAAAAGGCAAGAAACAAAAGAAGCACAGCTTTATGCT GCCCAGGCACATCTTAAACTCGGAGAAGTTAGTGTTGAATCTGAAAACTATGTGCAAGCTGTGGAGGAGTTCCAG TCCTGCCTTAACCTGCAGGAACAGTACCTGGAAGCCCACGACCGTCTCCTTGCAGAGACCCACTACCAGCTGGGC TTGGCTTATGGGTACAACTCTCAGTATGATGAGGCAGTGGCACAGTTCAGCAAATCTATTGAAGTCATTGAGAAC CTAAAGGAACTGCTACCCGAAATTAGAGAGAAGATAGAAGATGCAAAGGAGTCTCAGCGTAGTGGGAATGTAGCT GAACTGGCTCTGAAAGCTACTCTGGTGGAGAGTTCTACTTCAGGTTTCACTCCTGGTGGAGGAGGCTCTTCAGTC TCCATGATTGCCAGTAGAAAGCCAACAGACGGTGCTTCCTCATCAAATTGTGTGACTGATATTTCCCACCTTGTC AACGGAGGCAGTGGGGATGCTGTCCCCAGTGGAAATGAAGTTTCGGAAAACATGGAGGAGGAGGCTGAGAATCAG GCTGAAAGCCGGGCAGCAGTGGAGGGGACAGTGGAGGCTGCAGCTTGAAAGCACTGCATGTTAAGAGGGG GCACAGCCCTCCCCAAGGGAAAGTGTTTTTGTATATAATGTATTTTTTCACTTTTTGGAGGATTCTTTTTGTAT GAGCACTGCTGGTTTTATATATTAGCCAAAGGTTTTGTTCTGGCCTTCTGTACTGATCTGTGTTCCTGATCCTAA TTCCTATCTGTCTAACGTGGAGGTGATCAAGTGTGGCTGTAGGCCTTTGTTTTCCAATGGTGCTATATTCTGTTT TCAAACACTTCACTGAACCCAGCTGTCTTGCAAACTTTCAGTGGTGCTGTCCCTGGATGGGGGCTACAAAAACAA GAATTGGTGAAGATCTTGCTCTTCAGTGCTGAAAATGGATGATGGACTTTGGCTGTGAGCCAGGCCTAGGATGGT TCTTGTCCTATATCCACCTAGTCTTCACCTGGGGCTATAATTCTGTCCTGGAAAAAGAACTCTGAAAACCTGGGT CAGGGGAATGATTCCTAAGGAAAACGGTCTGCATTTGAGCTCTGGTTTGAAAGTAGCCAAGGGGACTGATGGTGG TGAGATATATCAACACTTGGAATTGTTACCCATCTGCAGAATTGACTTCTCAAATAAAGATGCTAAAAATCT

232/6881 FIGURE 217

MAMESTATAAVAAELVSADKIEDVPAPSTSADKVESLDVDSEAKKLLGLGQKHLVMGDIPAAVNAFQEAASLLGK
KYGETANECGEAFFFYGKSLLELARMENGVLGNALEGVHVEEEEGEKTEDESLVENNDNIDEEAREELREQVYDA
MGEKEEAKKTEDKSLAKPETDKEQDSEMEKGGREDMDISKSAEEPQEKVDLTLDWLTETSEEAKGGAAPEGPNEA
EVTSGKPEQEVPDAEEEKSVSGTDVQEECREKGGQEKQGEVIVSIEEKPKEVSEEQPVVTLEKQGTAVEVEAESL
DPTVKPVDVGGDEPEEKVVTSENEAGKAVLEQLVGQEVPPAEESPEVTTEAAEASAVEAGSEVSEKPGQEAPVLP
KDGAVNGPSVVGDQTPIEPQTSIERLTETKDGSGLEEKVRAKLVPSQEETKLSVEESEAAGDGVDTKVAQGATEK
SPEDKVQIAANEETQEREEQMKEGEETEGSEEDDKENDKTEEMPNDSVLENKSLQENEEEEIGNLELAWDMLDLA
KIIFKRQETKEAQLYAAQAHLKLGEVSVESENYVQAVEEFQSCLNLQEQYLEAHDRLLAETHYQLGLAYGYNSQY
DEAVAQFSKSIEVIENRMAVLNEQVKEAEGSSAEYKKEIEELKELLPEIREKIEDAKESQRSGNVAELALKATLV
ESSTSGFTPGGGGSSVSMIASRKPTDGASSSNCVTDISHLVRKKRKPEEESPRKDDAKKAKQEPEVNGGSGDAVP
SGNEVSENMEEEAENQAESRAAVEGTVEAGATVESTAC

233/6881 FIGURE 218

234/6881 FIGURE 219

MAASCVLLHTGQKMPLIGLGTWKSEPGQVKAAVKYALSVGYRHIDCAAIYGNEPEIGEALKEDVGPGKAVPREEL FVTSKLWNTKHHPEDVEPALRKTLADLQLEYLDLYLMHWPYAFERGDNPFPKNADGTICYDSTHYKETWKALEAL VAKGLVQALGLSNFNSRQIDDILSVASVRPAVLQVECHPYLAQNELIAHCQARGLEVTAYSPLGSSDRAWRDPDE PVLLEEPVVLALAEKYGRSPAQILLRWQVQRKVICIPKSITPSRILQNIKVFDFTFSPEEMKQLNALNKNWRYIV PMLTVDGKRVPRDAGHPLYPFNDPY

235/6881 FIGURE 220

236/6881 FIGURE 221

MSSGNAKIGHPAPNFKATAVMPDGQFKDISLSDYKGKYVVFFFYPLDFTFVCPTEIIAFSDRAEEFKKLNCQVIG ASVDSHFCHLAWVNTPKKQGGLGPMNIPLVSDPKRTIAQDYGVLKADEGISFRGLFIIDDKGILRQITVNDLPVG RSVDETLRLVQAFQFTDKHGEVCPAGWKPGSDTIKPDVQKSKEYFSKQK

237/6881 FIGURE 222

TCAGGGGTCGGCGGGTGACTTCTTTCCGGAAGAAAGCGAGGAACGCGCTCTGCGGGGTGAGCCGGACTCCCCAAC TCCGGACGATCAGCCCAGGACTGAGAGCCCCGAAGTCCCCAACCACAAGTAAGCGGCCCCAGAAGGACAAGTCTA ${\tt GGTCGCCGTCCAGAGCGCC} \underline{{\tt ATG}} {\tt GCCGCCCCCCCCCTTCGTTTGTGCCACATCGCCTTCCACGTGCCCGCCGGGCA}$ GCCCCTAGCCCGGAACCTGCAGCGCCTCTTCGGCTTCCAGCCCCTGGCTTCGCGGGAGGTGGACGGCTGGCGGCA GCTAGCCCTGCGCAGCGGCGACGCGGTCTTTTTGGTGAACGAGGGCGCAGGGTCTGGAGAGCCGCTGTACGGCCT GGATCCGCGTCACGCCGTGCCCAGCGCCACAAACCTGTGCTTCGACGTGGCGGACGCCGGCGCGCAACCCGGGA GCTGGCAGCGCTGCCAGCGTGCCTGTCCCTCCCGTTCGCGTGCGGGACGCGCAGGGTGCCGCCACTTACGC CCCCGGCAGCTCCCCCACACTTTTGCGCTGGTTCCACGACTGCCTGGGCTTTTGCCACTTGCCGCTGAGCCCAGG TGAGGATCCCGAGCTGGGCCTCGAAATGACAGCAGGGTTTGGGCTTGGGGGACTGAGGCTTACAGCCCTGCAGGC CCAGCCGGGCAGCATTGTCCCCACTCTTGTTCTGGCTGAGTCCCTTCCGGGGGCGACGACACGACAGGACCAGGT GGAGCAGTTCCTGGCCCGGCACAAGGGGCCCAGGCCTGCAGCACGTGGGGCTGTATACGCCTAACATTGTGGAGGC CACTGAGGGGGTGGCAACTGCTGGAGGCCAGTTCCTGGCTCCCCTGGGGCATACTACCAGCAGCCAGGAAAGGA CAAGTTTCTGCTTCAGGTCTTCACCAAGTCCCTTTTTACTGAGGACACTTTCTTCCTGGAGCTGATTCAGAGGCA GGGGGCCACTGGCTTTGGTCAGGGCAACATCAGAGCTCTGTGGCAGTCCGTACAGGAGCAATCTGCCAGGAGCCA ${\tt GGAAGCC} \underline{{\tt TAA}} {\tt GGATGCCCAGGGCTGGGTGCAGCCAGCTGTCCTGGGGGAGACCAGCACAGAACTGAGG}$ AACATCTGCAGGAGGCCCAACTAGTGAAAGGCTTTGCCTCCGGGGGGCAGGTGTGACTTCCATTTCATCAGTGCC TGCCAGAAGCTGTGTCTCTCATTGGGCTCCAAAGAGGTGGGATTTTTTAAAACTAAAACATTTCTTATATACAGT

238/6881 FIGURE 223

MAAPALRLCHIAFHVPAGQPLARNLQRLFGFQPLASREVDGWRQLALRSGDAVFLVNEGAGSGEPLYGLDPRHAV PSATNLCFDVADAGAATRELAALGCSVPVPPVRVRDAQGAATYAVVSSPAGILSLTLLERAGYRGPFLPGFRPVS SAPGPGWVSRVDHLTLACTPGSSPTLLRWFHDCLGFCHLPLSPGEDPELGLEMTAGFGLGGLRLTALQAQPGSIV PTLVLAESLPGATTRQDQVEQFLARHKGPGLQHVGLYTPNIVEATEGVATAGGQFLAPPGAYYQQPGKERQIRAA GHEPHLLARQGILLDGDKGKFLLQVFTKSLFTEDTFFLELIQRQGATGFGQGNIRALWQSVQEQSARSQEA

239/6881 FIGURE 224

240/6881 FIGURE 225

 ${\tt MGLEDEQKMLTESGDPEEEEEEEELVDPLTTVREQCEQLEKCVKARERLELCDERVSSRSHTEEDCTEELFDFL}\\ {\tt HARDHCVAHKLFNNLK}.$

241/6881 FIGURE 226

CGCGCCTGAGGAGGAGGAGGAGGGGGGGGGGCC<u>ATG</u>GCTGCTGTGGTGGCGGCTGCGGGGTGGCGGGACC GGCGGTCCTGCAGGTGGCCGGTCTCTACCGGGGCCTGTGCGCGGTGCGCAGCCGCGCCCTGGGCCTGGGCCTCGT GGTCGGGGCCGAGGCCGAGCTCCAGGCCAACCCTTTCTACGACCGCTACCGCGACAAGATCCAGCTGCTGCGCAG GTCAGACCCAGCTGCTTTTGAGTCCCGCCTGGAGAAACGCAGTGAATTTCGGAAGCAGCCAGTGGGGCATTCCAG GCAAGGTGATTTTATCAAATGTGTGGAACAGAAGACAGATGCCTTGGGGAAACAGTCTGTGAACAGAGGATTCAC TAAGGACAAGACTCTCAGTTCAATCTTTAACATTGAGATGGTAAAAGAAAAAACTGCAGAAGAAATAAAACAGAT TTGGCAGCAATATTTTGCAGCAAAAGATACAGTCTACGCAGTTATTCCTGCAGAAAAGTTTGATTTGATCTGGAA CCGGGCTCAGTCCTGTCCAACATTTCTATGTGCTCTGCCAAGAAGGGAAGGTTATGAGTTTTTTGTAGGACAATG TTTATATCACTATCCTGAACTTAAGGAAGAAAAGGGCATAGTGCTGATGACTGCAGAAATGGATTCCACATTTCT GAATGTTGCTGAGGCACAGTGCATCGCCAACCAAGTTCAGCTCTTCTACGCTACTGATCGGAAAGAGACCTACGG ACTTGGAGCAGAACTGAAATGTGCCCAGAACCAAAATAAGACT<u>TAG</u>AACTGTACAGGTTGGCCCTTCACCTAGTT GACTCAGCCCTCGATAGTCTAGAGCCCACCCCCTCCTCAGGAACTCAAGAGCTCAGCATTTATAATGAGCAGTTG GTAATGAGTTGCCCTATGTGCTTGTCGCAAGCAGTCACAGAGATGAGCCCTATTACTTGATATTCAGGAACAAAG GTACCTGAACATTCTGATAATTATCTCAGCATACTTGAGGTTTCCTTTTTTAAGTGTTCGAGGTTATAACAAGAG ACAGCCAAGGACCTACAAGACAGTTGACTTGATTTTGCACAGTGTAACAGCGCAGTTGCATTCTGGCCACTTTGA CCTTATAGCTCCCAAATGATGAGTTTGTCATCTTTATGAACTCATGACAGGATAATAAGCTTGAAGACCTGCTGT AGTTAGATATGGGCTTTAATCCTTCCCAGGCACCAGTCAGCTGAACAAAAGCATAAGCCAAACATCCTGTTTAAA CTGTAGAATAACCAGATATTCCCATCAGGTTAAAGACTTCATCTAGATGATGCCCCCCAGAGATGCCTTTAGTGT AAGTAGCTGGGCTTGGGGTATCAGCAAATTTCAGGTATAGTTAGATAAACAGGTACAGGGCCTGCATACTATTAAA ATAAATAAAATTCTTTTGTAAGGAG

242/6881 FIGURE 227

MAAVVVAAAGGAGPAVLQVAGLYRGLCAVRSRALGLGLVSPAQLRVFPVRPGSGRPEGGADSSGVGAEAELQANP FYDRYRDKIQLLRRSDPAAFESRLEKRSEFRKQPVGHSRQGDFIKCVEQKTDALGKQSVNRGFTKDKTLSSIFNI EMVKEKTAEEIKQIWQQYFAAKDTVYAVIPAEKFDLIWNRAQSCPTFLCALPRREGYEFFVGQWTGTELHFTALI NIQTRGEAAASQLILYHYPELKEEKGIVLMTAEMDSTFLNVAEAQCIANQVQLFYATDRKETYGLVETFNLRPNE FKYMSVIAELEQSGLGAELKCAQNQNKT

243/6881 FIGURE 228

ACCTGCCCTCATCCTGGCCCGCGACTGTAAGACCGGACCCACATCCAGACCAATCTTCCTGTCCGGCTGCTGCGA CGCGGTCCGCAGGTTGCAGGCGGGCGGCCGGGGCGCCTGAAGGTTACCGAGTGCATGACGGCCTCAGTTCCCGCG GTGGCGGCGACGGTCGCAGGAGGTGCCGTCTCCCAGGTGCGCGCTTCGCTCCCGGAGCCGCGGAACTCGGT CGCGCCATGGCGTCCAACATGGACCGGGAGATGATCCTGGCGGATTTTCAGGCATGTACTGGCATTGAAAACATT GACGAAGCTATTACATTGCTTGAACAAAATAATTGGGACTTAGTGGCAGCTATCAATGGTGTAATACCACAGGAA AATGGCATTCTACAAAGTGAATATGGAGGTGAGACCATACCAGGACCTGCATTTAATCCAGCAAGTCATCCAGCT TCAGCTCCTACTTCCTCTTCTTCAGCGTTTCGACCTGTAATGCCATCCAGGCAGATTGTAGAAAAGGCAACCT CGGATGCTGGACTTCAGGGTTGAATACAGAGACAGAAATGTTGATGTGGTACTTGAAGACACCTGTACTGTTGGA GAGATTAAACAGATTCTAGAAAATGAACTTCAGATACCTGTGTCCAAAATGCTGTTAAAAGGCTGGAAGACGGGA GATGTGGAAGACAGTACGGTCCTAAAATCTCTACACTTGCCAAAAAACAACAGTCTTTATGTCCTTACACCAGAT TTGCCACCACCTTCATCATCTAGTCATGCTGGTGCCCTGCAGGAGTCATTAAATCAAAACTTCATGCTGATCATC ACCCACCGAGAAGTCCAGCGGGAGTACAACCTGAACTTCTCAGGAAGCAGTACTATTCAAGAGGTAAAGAGAAAT GTGTATGACCTTACAAGTATCCCCGTTCGCCACCAATTATGGGAGGGCTGGCCAACTTCTGCTACAGACGACTCA ATGTGTCTTGCTGAATCAGGGCTCTCTTATCCCTGCCATCGACTTACAGTGGGAAGAAGATCTTCACCTGCACAG ACCCGGGAACAGTCGGAAGAACAAATCACCGATGTTCATATGGTTAGTGATAGCGATGGAGATGACTTTGAAGAT GCTACAGAATTTGGGGTGGATGATGGAGAAGTATTTGGCATGGCGTCATCTGCCTTGAGAAAATCTCCAATGATG CCAGAAAACGCAGAAAATGAAGGAGATGCCTTATTACAATTTACAGCAGAGTTTTCTTCAAGATATGGTGATTGC CATCCTGTATTTTTTATTGGCTCATTAGAAGCTGCTTTTCAAGAGGCCTTCTATGTGAAAGCCCGAGATAGAAAG CTTCTTGCTATCTACCTCCACCATGATGAAAGTGTGTTAACCAACGTGTTCTGCTCACAAATGCTTTGTGCTGAA TCCATTGTTTCTTATCTGAGTCAAAATTTTATAACCTGGGCTTGGGATCTGACAAAGGACTCCAACAGAGCAAGA TTTCTCACTATGTGCAATAGACACTTTGGCAGTGTTGTGGCACAAACCATTCGGACTCAAAAAAACGGATCAGTTT CCGCTTTTCCTGATTATTATGGGAAAGCGATCATCTAATGAAGTGTTGAATGTGATACAAGGGAACACAACAGTA GATGAGTTAATGATGAGACTCATGGCTGCAATGGAGATCTTCACAGCCCAACAACAGGAAGATATAAAGGACGAG GCAAAGAGGGAAGCTCACGAGAGAGAGAGGCAGAACAGTTTCGTTTGGAGCAGATTCGCAAAGAACAAGAAGA GAACGTGAGGCCATCCGGCTGTCCTTAGAGCAAGCCCTGCCTCCTGAGCCAAAGGAAGAAATGCTGAGCCTGTG AGCAAACTGCGGATCCGGACCCCCAGTGGCGAGTTCTTGGAGCGGCGTTTCCTGGCCAGCAACAAGCTCCAGATT GTCTTTGATTTTGTAGCTTCCAAAGGATTTCCATGGGATGAGTACAAGTTACTGAGCACCTTTCCTAGGAGAGAC GTAACTCAACTGGACCCAAATAAATCATTATTGGAGGTAAAGTTGTTCCCTCAAGAAACCCTTTTCCTTGAAGCA AAAGAGTAAACACGGCCCAGCGGTGGAACCAGCCATTCCTTGACAAGCCAGCAGCCTGCGTCAGGAGAAGGGCTC CTCGCCAACCCACCCACACGCTCGTCTCACTCAATTCAATGTCACACTTCTGCCTCTTGCAAAATTGCTGGAAAA AGTAATAATAAATATAGCTACTTAAAAAAAAAAAAAA

FIGURE 229

TCTTTTCAAAAAAAGCTGATGAGGTCGGAAAAAAGGGAGAAGAAACCGGCACCCTCTCTGAGAGGCAACAGAAGC AGCAATTGTTTCAGCGAAAAAAGCAGCAAGGGAGGGAGTGAAGGAAAAAAGCAAAAAAGGGGGGGCGACACGCAAGT GCCTGTAGGGGTGAAAGGAGCAGGGACCGGCGATCTAGGGGGGGATCAGCTACAAAAGAAACTGTCACTGGGAGC GCAAAGGGGCACAGGCCGGGGACCGCGAGAGGTGGCAAAGTGGCACCGGGCGCCGAGGCTGCTGAGCGCTCGCCG AGACGGCGACCGGACTGCCCCGGAACTGCGGCGACTCTCCCTACTCAGAACTTGGCCTACGTTTCCCAGGA TGCTGCCGCGAGCTGCCCCAGCAGTCCGGGCTCCGTAGACGCTTTCCGCATCACTCTCCTCCGGGCTGCCGG GAGTCCCGGGACCTGGCGGGGCCGGCATGACGGGCTTCTCGGGGGCCCGCCGCCACGCCCGGCAGCCTCCGGAGAC TTCCTGAGCGGCATTAGCCCACGGCTTGGCCCGGACGCGACCAAAGGCTCTTCTGGAGAAGCCCAGAGCACTGGG CAATCGTTACGACCTGTAACTTGAGGGCCACCGAACTGCTACTCCCGTTCGCCTTTGGCGATCATCTTTTAACCC TCCGGAGCACGTCAGCATCCAGCCACCGCGGCGCTCTCCCAGCAGCGGGGACCCAGGACTATCCCTTCGGCGAG ACGGATGGAAACCGAGCCCCCTGGAGGACCTGCCCCTGCAGTTCTGCCTCACACGGCTCAAGTCACCACCGTGAA ${\tt CAAGGGACCCTAAAGA} \underline{{\tt ATG}} {\tt GCCGAGCCTTGGGGGGAACGAGTTGGCGTCCGCAGCTGCCAGGGGGGACCTAGAGCA}$ ${\tt ACTTACTAGTTTGCAAAATAATGTAAACGTCAATGCACAAAATGGATTTGGAAGGACTGCGCTGCAGGTTAT}$ GAAACTTGGAAATCCCGAGATTGCCAGGAGACTGCTACTTAGAGGTGCTAATCCCGATTTGAAAGACCGAACTGG TTTCGCTGTCATTCATGATGCGGCCAGAGCAGGTTTCCTGGACACTTTACAGACTTTGCTGGAGTTTCAAGCTGA TGTTAACATCGAGGATAATGAAGGGAACCTGCCCTTGCACTTGGCTGCCAAAGAAGGCCCACCTCCGGGTGGTGGA GTTCCTGGTGAAGCACACGGCCAGCAATGTGGGGCATCGGAACCATAAGGGGGACACCGCCTGTGATTTGGCCAG GCTCTATGGGAGGAATGAGGTTGTTAGCCTGATGCAGGCAAACGGGGCTGGGGGAGCCACAAATCTTCAA<u>TAA</u>AC GTGGGGAGGGCTCCCCCACGTTGCCTCTACTTTATCAATTAACTGAGTAGCTCTCCTGACTTTTAATGTCATTTG TTAAAATACAGTTCTGTCATATGTTAAGCAGCTAAATTTTCTGAAACTGCATAAGTGAAAATCTTACAACAGGCT TATGAATATATTTAAGCAACATCTTTTTAACCTGCAAAATCTGTTCTAACATGTAATTGCAGATAACTTTGACTT TCTTCTGAATATTTTATCTTTCCTTGGCTTTTCCCTTGCTTCCCCTTTTGCCAATCTCAACACCCAAGTTGAAGA AAAA

245/6881 FIGURE 230

 ${\tt MAEPWGNELASAAARGDLEQLTSLLQNNVNVNAQNGFGRTALQVMKLGNPEIARRLLLRGANPDLKDRTGFAVIH DAARAGFLDTLQTLLEFQADVNIEDNEGNLPLHLAAKEGHLRVVEFLVKHTASNVGHRNHKGDTACDLARLYGRN EVVSLMQANGAGGATNLQ$

246/6881 FIGURE 231

247/6881 FIGURE 232

MGNCGGFRGGFGSGIRGRGRSRRRGRGRGRGRGGRAEDKEWMPVTKLGCLVKDMKIKSLEEIYLFSLPIKESEI IDFFLGASLKDEVLKIMPVQTQTRAGQRTRFKAFVAIGDYNGHVGLGVKCSKEVATAIHGAIILAKLSIVPVRRG YWGNKIGKPHTVPCKVTGRCGSALVHLIPVPRGTGIVSAPVPKKLLMMAGIDDCCTSAWGCTATLGNFAKATFDA ISKTYSYLTPDLWKETVFTKSPDQEFTDHLIKAHARVSVQRTQAPAVATT

248/6881 FIGURE 233

249/6881 FIGURE 234

MSKSESLKEPEQLQKLLTGGLSIEATNESLRSHFEQWGTLTDCVVLRDPNTKCSRGFGFVTYATVEEVDAATNAR PHKVDGRVVETKRAVSREDSQRPGAHLTVKKFGKMEVIEIMTDHGSGKKRDFAFVTFDDHDSVDKTVIQKYHIVN GHNCEVRKALSKQEMASASSSQRGRTGSLMPKAQCLAFEPSMTGSQLSCKAMLLTAYDCLLFCACQVFHLTPLLS LSKPIQSSGEL

250/6881 FIGURE 235

CGGTCCCGCACTGGTGCAGCC<u>ATG</u>TCCTCTTCCCCGTGGGAGCCTGCGACCCTGCGCCGGGTGTTCGTGGTGGGG GTTGGCATGACCAAGTTTGTGAAGCCTGGAGCTGAGAATTCAAGAGACTACCCTGACTTGGCAGAAGAAGCAGGC AAGAAGGCTTTAGCTGATGCACAGATCCCTTATTCAGCAGTGGACCAGGCATGTGTTGGCTATGTTTTTGGTGAC TCTACCTGTGGGCAGAGGGCTATCTATCACAGTTTGGGAATGACTGGAATTCCTATAATCAATGTCAACAATAAC TGTGCTACTGGTTCTACTGCTTTGTTTATGGCCCGCCAGCTGATTCAGGGTGGTGTGGCAGAATGTGTCTTGGCT CTTGGGTTTGAGAAGATGAGTAAGGGAAGCCTTGGAATAAAATTTTCAGATAGAACCATTCCCACTGATAAGCAT GTTGACCTCCTGATCAATAAGTATGGATTGTCTGCTCACCCAGTTGCTCCTCAGATGTTTGGGTATGCTGGAAAA AATAACCCGTATTCCCAGTTCCAAGATGAATACAGTTTAGATGAAGTGATGGCATCTAAAGAAGTTTTTGATTTT TTGACTATCTTACAATGTTGTCCCACTTCAGATGGTGCTGCAGCAGCAATTTTGGCCAGTGAAGCATTTGTACAG AAGTATGGCCTGCAATCCAAAGCTGTGGAAATTTTGGCACAAGAAATGATGACTGATTTGCCAAGCTCGTTTGAA GAAAAAGCATTATTAAAATGGTTGGCTTTGATATGAGTAAAGAAGCTGCAAGAAAATGCTATGAGAAATCTGGC CTGACACCAAATGATATTGACGTAATAGAACTTCACGATTGCTTTTCTACCAACGAACTCCTGACTTATGAAGCA CTCGGACTCTGTCCAGAAGGACAAGGTGCAACGCTGGTTGATAGAGGAGATAATACATATGGAGGAAAGTGGGTC ATAAATCCTAGTGGTGGACTGATTTCAAAGGGACACCCACTAGGCGCTACAGGTCTTGCTCAGTGTGCAGAACTC TGCTGGCAGCTGAGAGGGGAAGCCGGAAAGAGCCAAGTTCCTGGTGCAAAGGTGGCTCTGCAGCATAATTTAGGC ATTGGAGGAGCTGTGGTTGTAACACTCTACAAGATGGGTTTTCCGGAAGCCGCCAGTTCTTTTAGAACTCATCAA ATTGAAGCTGTTCCAACCAGCTCTGCAAGTGATGGATTTAAGGCAAATCTTGTTTTTAAGGAGAATGAAGAAA CTTGAAGAGGGAAGGGGAACAGTTTGTGAAGAAAATCGGTGGTATTTTTGCCTTCAAGGTGAAAGATGGCCCTGGG GGTAAAGAGGCCACCTGGGTGGTGGATGTGAAGAATGGCAAAGGATCAGTGCTTCCTAACTCAGATAAGAAGGCT GACTGCACAATCACAATGGCTGACTCAGACTTCCTGGCTTTAATGACTGGTAAAATGAATCCTCAGTCGGCCTTC TTTCAAGGCAAATTGAAAATCACTGGCAACATGGGTCTCGCTATGAAGTTACAAAATCTTCAGCTTCAGCCAGGC AACGCTAAGCTCTGAAGAACTCCCTTTGGCTACTTTTGAAAATCAAGATGAGATATATAGATATATACCATACA TTTTATTGTCAGAATTTAGACTGAAACTACACATTGGCAAATAGCGTGGATAGGATTTGTTTCTTAATGGGTGTG ACCAATCCTGTTTTTCCTATGCTCTGGGTGAATAGAGCCTGATGGTATACTACTGCTTTGCGGAATTGCATACAA CTGTGCATTACAAAGTTAATATGGTAATTATGGTCTGGGGTAAAATTGAGTTTCAGAATAAAATTAGGAACAGTA AAATCCAAAGAACTATGTAAACAAAAAAGCTTTTGTTTTGCTTACAAAGTATATTTAAGGATTATTCTGCTGAAG ATTCAGTTTAAGAGTTTTCCTTGGGAGAACTAAGTAAGAAACACAATGCCAACAGCTGGCCAGTAATTAGTGTTG TGCACTTCATGTCATTAATCAATTTCTCAATAGTTCTTAAAATTAGTGAGATTAAAAATCTAAAAATTTTGCATT TCATGCTATCAGAAACAGTATTTTCTTCCCAAATCAAAATAAAAGAAATATGATCAGAGCTTGAACACAGGCTTA TTTTTAAAATAAAAATATTTTTAACATGGGTTTCCTTATTGAAAAATCAGTGTATTAGTCATAAAACACCATCAT TAAGAATAATTGAACAATAAAGTTTGCTTTCAGATGCAGTTTTCAAATTATAATCTCATTTCAATTTATAACGTT CTCAGTCCTTTGTTATAATTTTCCTTTTTCATGTAAGTTTAATTATCTGCATTTATCTTTTTTCCTAGTTTTTCT AATACTAATGTTATTTCTTAAAATTCAGTGAGATATAGGATAAAATAATGCTTTGAGAAGAATGTTTAATAGAAA ATTAAAATAACTTTTTCTGGCA

251/6881 FIGURE 236

MSSSPWEPATLRRVFVVGVGMTKFVKPGAENSRDYPDLAEEAGKKALADAQIPYSAVDQACVGYVFGDSTCGQRA
IYHSLGMTGIPIINVNNNCATGSTALFMARQLIQGGVAECVLALGFEKMSKGSLGIKFSDRTIPTDKHVDLLINK
YGLSAHPVAPQMFGYAGKEHMEKYGTKIEHFAKIGWKNHKHSVNNPYSQFQDEYSLDEVMASKEVFDFLTILQCC
PTSDGAAAAILASEAFVQKYGLQSKAVEILAQEMMTDLPSSFEEKSIIKMVGFDMSKEAARKCYEKSGLTPNDID
VIELHDCFSTNELLTYEALGLCPEGQGATLVDRGDNTYGGKWVINPSGGLISKGHPLGATGLAQCAELCWQLRGE
AGKRQVPGAKVALQHNLGIGGAVVVTLYKMGFPEAASSFRTHQIEAVPTSSASDGFKANLVFKEIEKKLEEEGEQ
FVKKIGGIFAFKVKDGPGGKEATWVVDVKNGKGSVLPNSDKKADCTITMADSDFLALMTGKMNPQSAFFQGKLKI
TGNMGLAMKLQNLQLQPGNAKL

252/6881 FIGURE 237

 ${\tt GGCCCTGCGCGGGGCAACATGGCGGGGTCCAGGTGGAGGTCTTGAGGCTATCAGATCGGT} \underline{{\tt ATG}} {\tt GCATTGGCGTCC}$ GGGCCCGCAAGGCGGGCGCTAGCTGGCTCCGGGCAGCTCGGCCTTGGGGGCCTTCGGGGCCCCGAGACGCGGGGCG TATGAGTGGGGCGTGCGCTCCACGCGGAAGTCGGAGCCTCCTCCCCTGGATAGGGTGTACGAGATCCCTGGACTG GGCTACAAGGACCCAAGGTTCTACCGCTCGCCCCCTCTTCACGAGCATCCGCTGTACAAAGACCAGGCCTGCTAT ATCTTTCACCACCGTTGCCGCCTTCTCGAGGGTGTAAAGCAGGCCCTCTGGCTCACCAAGACCAAGTTAATAGAA GGCCTTCCCGAGAAAGTGCTTAGCCTTGTTGATGATCCAAGGAACCACATAGAGAACCAAGACGAGTGCGTTCTG GTGGACAACCTAATACAGCTGTGTAAATCTCAGATTCTCAAGCATCCTTCTCTGGCCAGGAGGATCTGTGTCCAA AACTCCACGTTTTCTGCTACCTGGAACCGAGAGTCTCTTCTCCTTCAAGTCCGTGGTTCTGGTGGAGCCCGACTG AGCACTAAGGATCCTCTGCCCACCATCGCCTCCAGAGAGGAGATTGAAGCTACTAAGAATCATGTTCTAGAGACC TTCTACCCCATATCACCCATCATCGATCTTCATGAATGCAATATTTATGATGTGAAAAATGACACAGGATTCCAG CCAGATCAGCTGCGGGCCAAGATGATCCTGTTTGCTTTTGGCAGTGCCCTGGCTCAGGCCCGGCTCCTCTATGGG AATGATGCCAAGGTCTTGGAGCAGCCCGTGGTGGTGCAGAGCGTGGGCACGGATGGACGTGTCTTCCATTTCCTA GTGTTTCAACTGAATACCACAGACCTGGACTGTAACGAGGGTGTCAAGAATTTGGCCTGGGTGGACTCAGACCAG CTCCTCTATCAGCATTTTTGGTGTCTCCCAGTGATCAAAAAGAGAGTGGTTGTGGAACCTGTTGGGCCAGTTGGT ${\tt TTCAAGCCAGAGACATTCAGAAAGTTTTTAGCTCTATATTTGCATGGTGCTGCG} \underline{{\tt TGA}} \underline{{\tt GCGGAGGACCCCTCTGAA}}$ TCCTGAAACCCCTCTTGCCTCTTCCACGGAAGAGGGCCTGGGCCCCGTGGAGCCTCAGTGCCCGTTTGGCCTG CTGCTCTCGCTGACAATAAAGAGCCCTTGCGTTGC

253/6881 FIGURE 238

MALASGPARRALAGSGQLGLGGFGAPRRGAYEWGVRSTRKSEPPPLDRVYEIPGLEPITFAGKMHFVPWLARPIF PPWDRGYKDPRFYRSPPLHEHPLYKDQACYIFHHRCRLLEGVKQALWLTKTKLIEGLPEKVLSLVDDPRNHIENQ DECVLNVISHARLWQTTEEIPKRETYCPVIVDNLIQLCKSQILKHPSLARRICVQNSTFSATWNRESLLLQVRGS GGARLSTKDPLPTIASREEIEATKNHVLETFYPISPIIDLHECNIYDVKNDTGFQEGYPYPYPHTLYLLDKANLR PHRLQPDQLRAKMILFAFGSALAQARLLYGNDAKVLEQPVVVQSVGTDGRVFHFLVFQLNTTDLDCNEGVKNLAW VDSDQLLYOHFWCLPVIKKRVVVEPVGPVGFKPETFRKFLALYLHGAA

254/6881 FIGURE 239

AGCCGGAGCGGTAGCGGCGGCGGCGGCGGCGGCGAGGCTCGGCGCCCTCTTCCCTGCAAACCATGTTTGCCA ${\tt AAGGCAAAGGCTCGGCGGGCCCCTCGGATGGGCAGGCTCGGGAAAAGTTAGCTTTATACGTCTACGAATATTTAC}$ TGCACGTAGGAGCACAGAATCTGCACAGACCTTCTTATCGGAGATTCGATGGGAAAAAAACATCACGTTGGGAG AACCGCCTGGGTTTTTGCACTCGTGGTGGTGTTATTTTGGGACCTTTACTGTGCAGCTCCTGAAAGGAGAGACA CTTGTGAACATTCAAGTGAAGCAAAAGCCTTTCATGATTATAGTGCAGCAGCTGCCCCGAGCCCCGTGCTTGGCA CCTCGCCGCACGCCACCCTCCACCTCACAATCCTAGCAGCATGATGGGACCCCACAGTCAGCCTCCGGGAGGAG TTCCTGGGACACAGCCATTGCTGCCCAATTCTATGGATCCCACACGACAACAAGGCCACCCCAACATGGGAGGAT CAATGCAGAGAATGAACCCTCCCCGAGGCATGGGGCCCATGGGTCCCGGCCCACAGAATTACGGCAGCGGCATGA GACCACCACCCAACTCCCTCGGCCCCGCCATGCCCGGGATTAACATGGGCCCGGGAGCTGGCAGACCCTGGCCCA ATCCTAACAGTGCTAACTCAATTCCATACTCCTCCTCATCACCTGGTACCTATGTGGGGACCCCTGGTGGTGGCG GTCCTCCAGGAACACCCATTATGCCCAGTCCCGCAGATTCAACAAATTCCAGTGACAACATCTACACAATGATTA ATCCAGTGCCGCCTGGAGGCAGCCGGTCCAACTTCCCGATGGGTCCGGCTCCGGACGGTCCGATGGCCGCATGG GTGGCATGGAGCCACACCACATGAATGGATCATTAGGGTCAGGCGACATAGACGGACTTCCAAAAAATTCTCCTA ACAACATAAGTGGCATTAGCAATCCTCCAGGCACCCCTCGAGATGACGGCGAGCTAGGAGGGAACTTCCTCCACT GCATCTCCCTGCTCCCCTCAACCCCCTCCCACCCCATCCACCTTTCCCAATTTTAGTTTCATGCAA

255/6881 FIGURE 240

MFAKGKGSAVPSDGQAREKLALYVYEYLLHVGAQKSAQTFLSEIRWEKNITLGEPPGFLHSWWCVFWDLYCAAPE
RRDTCEHSSEAKAFHDYSAAAAPSPVLGNIPPNDGMPGGPIPPGFFQGPPGSQPSPHAQPPPHNPSSMMGPHSQP
PGGVPGTQPLLPNSMDPTRQQGHPNMGGSMQRMNPPRGMGPMGPGPQNYGSGMRPPPNSLGPAMPGINMGPGAGR
PWPNPNSANSIPYSSSSPGTYVGPPGGGGPPGTPIMPSPADSTNSSDNIYTMINPVPPGGSRSNFPMGPGSDGPM
GGMGGMEPHHMNGSLGSGDIDGLPKNSPNNISGISNPPGTPRDDGELGGNFLHSFQNDNYSPSMTMSV

256/6881 FIGURE 241

ATGTACGCCTTTGTGCGGTTCCTGGAGGACAACGTCTGCTACGCGCTGCCCGTGTCGTGCGCGCGACTTCAGC CCCCGCTCGCGGCTGGATTTTGACAACCAGAAGGTGTACGCCGTGTACCGGGGCCCGGAGGAATTGGGCGCCGGG CCCGAGAGCCCCCCGCGCGCCCCCGCGACTGGGGCGCGCTGTTGCTCCACAAGGCCCAGATCCTGGCGCTGGCA GAAGACAAATCTGACCTTGAAAACAGTGTGATGCAGAAGAAAATAAAAATCCCCAAGCTTTCTCTTAATCATGTA GAAGAAGATGGAGAGGTTAAAGATTATGGGGAAGAAGATTTACAGCTTAGACACATCAAGGATTGTCTGGGGAAA TATTGATCTGCAGTCCAAGAAAATCCCAGCTGCCCTTGCCTGAACTGATTCTCGTTGTCCTACACAGAGACCTGA GGGGCGGAAGCCGAAGTGGCGCACAAGAGCATCGAGGCAGTGGTGGCTCGGCTAGAGAAGCAGAACGGCCT ${\tt GAGCCTGGGCCATAGCACGTGTCCGGAAGAGGTCTTCGTGGAGGCCTCGCCAGGCACAGAGGAC{\color{red} {\bf ATC}}{\tt GACAGTCT}}$ AGAAGATGCTGTGGTGCCCCGGGCTCTGTATGAGGAGCTGCTGCGCAACTACCAGCAGCAACAGGAAGAGATGCG ACTTGTGTCTGAAATGAAGGAGCTCCGTGACCTTAACCGGAGGCTCCAGGACGTGCTCCTGAGGCTTGGCAG $\tt CGGTCCCGCCATTGATCTGGAAAAGTAAAGTCAGAATGTCTCGAGCCCGAGCCGGAGTTACGGAGCACTTTCAG$ TGAGGAAGCAAATACGTCGTCCTATTACCCCGCTCCTGCGCCTGTCATGGACAAGTATATCCTAGACAATGGCAA GGTCCATCTGGGAAGCGGGATTTGGGTTGATGAGGAGAAATGGCACCAGCTACAAGTAACCCAAGGAGATTCCAA GTACACGAAGAACTTGGCAGTTATGATTTGGGGAACAGATGTTCTGAAAAACAGAAGCGTCACAGGCGTCGCCAC AAAAAAAAGAAGATGCAGTCCCTAAACCACCCCTCTCGCCTCGCAAACTAAGCATCGTCAGAGAGTGTTTGTA TGACAGAATAGCACAAGAAACTGTGGATGAAACTGAAATTGCACAGAGACTCTCCAAAGTCAACAAGTACATCTG TGAAAAATCATGGATATCAATAAATCCTGTAAAAATGAAGAACGAAGGGAAGCAAAATACAATTTGCAA<u>TAA</u>AC TTTGGATTTTTCAT

257/6881 FIGURE 242

MDSLEDAVVPRALYEELLRNYQQQQEEMRHLQQELERTRRQLVQQAKKLKEYGALVSEMKELRDLNRRLQDVLLL RLGSGPAIDLEKVKSECLEPEPELRSTFSEEANTSSYYPAPAPVMDKYILDNGKVHLGSGIWVDEEKWHQLQVTQ GDSKYTKNLAVMIWGTDVLKNRSVTGVATKKKKDAVPKPPLSPRKLSIVRECLYDRIAQETVDETEIAQRLSKVN KYICEKIMDINKSCKNEERREAKYNLQ

258/6881 FIGURE 243

CCTTTCGTTGCCTGATCGCCGCCATCATGGGTCGTATGCGTGTCCCTGAGAAGGGCCTGTCCCAGTCGGCTTTAC
CCTATCGACGCAGCTTCCCCACTTGGTTGAAGTTGACATCTGACGACGTGAAGGAGCAGATTTACAAACTGGCCA
AGAAGGGCCTTACTCCTTCACAGATCGGTGTAATCGTGAGAGAATCACATGGTGTTGCACAAGTACGTTTTGTGA
CAGGCAATCTCTACCATTTAATTAAGAAAGCAGTTGCTGTTCAAAGCATCTTGAGAGGAACAGAAAGGATAAGGA
TGCTAAATTCCATCTGATTCTGATAGAGAGACCAGATTCACCGTTTG

259/6881 FIGURE 244

260/6881 FIGURE 245

AGAAGATGCTTCAAATTCAACCCGAGAAGGATATCATTGTAGAGTTTATCAAAAATGGAGATTTCAAGTATGTCC ATGACTATCGAAAAATCAAGAGCCAGAACCGAAATGGGGAGTTTGAATTGATGCATGTTGATGAGTTTATTGATG AACTATTGCACAGTGAGAGAGTCTGTGATATCATTCTGCCCCGACTACAGAAACGCTATGTATTAGAGGAAGCTG AGCAACTGGAGCCTCGAGTTAGTGCTCTGGAAGAGGACATGGATGATGTGGAGTCCAGTGAAGAGGAAGAAGAGG AGGATGAGAAGTTGGAAAGAGTGCCATCACCTGATCACCGCGGAGAAGCTACCGAGACTTGGACAAGCCCCGTC GCTCTCCCACACTGCGCTACAGGAGGAGTAGGAGCCGGTCTCCCAGAAGGCGGAGTCGATCTCCCAAAAGGAGAA GCCCCTCCCCTCGCCGAGAAAGGCATCGGAGCAAGAGTCCAAGACGTCACCGCAGCAGGTCCCGAGATCGGCGGC ACAGATCCCGTTCCAAGTCCCCAGGTCATCACCGTAGTCACAGACACAGGAGCCACTCAAAGTCTCCCGAAAGGT CTAAGAAGAGCCACAAGAAGAGCCGGAGAGGGAATGAG<u>TAA</u>TGGACTCAGTTTGGTTTTAGTCCACATGGCCTCC TGTGGATATAAGGATATCTGTATGTGGAAGGATTAAGATCTCCCCCAGGCAGCTATAAGAATATTTTAGTTTTTT TCTTATCAAGTTTCTCAACCTTTATTTTTAATGAAGGAGGTGCTGAGTTTTGTATCTTTTTAATCATAATCAACA TCAGTTTTTGACCCAACTAACCTTGACTGTATTCAAACTTATGAGAGTATAAAGGATCTGGAGGTTGGGGATATG ACTGACAAGGAAAGGCTGTGGCCACCTGATGACCCTTTCCCTTTTTATTAAACCGGACACACCTGTTTCCCATTT CGCTGTAGTTTAGTTTTTGGTTTGTTGTTGGTTGGAACTGCTTTGAGAATCCTGGGATTTGTGCTGCTGTTAT TCAAAGATCAAAGGAGTAAAACATAGTTGCTCCTAACTTTTTTCCAGCAGCAGCAAGTGGTAATAAACATGAAAA CTGGTTTGTAGCAGTTTTGAAAGAATAGAATGCATTCAAATGTAAGGCTGCTTCTGGATCATTAAAGCCAGTTTC ATCAAACAGTTCAACAGAGAGCAGCACTTAATACCCTTTATACAGCCCATTTTTTCATAGTTTCATTTGTTCTTG CCCACAAGCTTGAAATCCAGGTTAAGGTATCCAGCCTTTATCATATAAGCATTGACATTATCCAGGCCTAGTCAG TAGCAGTAGGGTAACGGGATTGAAAAAGATTTGATGGAGAGGAAAGTATCTAATATTAGTCATGGTTTTGACCTA AATTGCTAGACAGTCGTGCCATTCACAAAGTCAGAAAATACAGCAGGAAGAGACAGCTTTTAGAGGGGCAGAGAA TTAGAGGATGGTGGTAGTAATGAAAAAGATGCATTCAGTTTAACAAGTTTAATTTGAGACAGCTATGGTATAGCT AAAAACAAAAGCCCATAAAGTTGGAGATAGGGACCAGAGTTTAACATAGCGATCTAGGCCAGAATTGACAATGTT AGGCAACACCAACACAGGAAGAATAGAAGTCACCTATTGAAAACTGGAATGGCCCATTCAGAAAGACAGGAGAA CATCGATAATCAAGAGATTATTAAGATCTTTGCTAGAAGAGTTCCTTTACCTGTACTTAACTCCCTTAAAAAGAG AAAAGTGATGGAATGACTTCTGCAACTGTAGTCCCAGCAGGAACTGTGAAGACCAGCTGCCCTGCAGGATCCAGT TTTTCTTGGGAGGTTGTATCTGGTCATAAGGTAAACATTCTATATATTCTATGCCTGCTCTAGAATTGAAAGACT TCAGCAGTATTAAAGCATTTTTTAATCTT

261/6881 FIGURE 246

MLQIQPEKDIIVEFIKNGDFKYVRMLGALYMRLTGTAIDCYKYLEPLYNDYRKIKSQNRNGEFELMHVDEFIDEL LHSERVCDIILPRLQKRYVLEEAEQLEPRVSALEEDMDDVESSEEEEEEDEKLERVPSPDHRRRSYRDLDKPRRS PTLRYRRSRSRSPRRRSRSPKRRSPSPRRERHRSKSPRRHRSRSRDRRHRSRSKSPGHHRSHRHRSHSKSPERSK KSHKKSRRGNE

FIGURE 247

GTTGGTTCGTGCTGCACTACAATGCAGGACTGCTCTCCTACTACACGTCCAAGGACAAAATGATGAGAGGGCTCTC GCAGAGGATGTGTTAGACTCAGAGGAGCTGTGATTGGTATAGACGATGAGGACGACACCTTCACAATAACTG TTGATCAGAAAACCTTCCATTTCCAGGCCCGTGATGCTGATGAGGAGAAGAGTGGATCCATGCCTTAGAAGAAA CAATTCTTCGACATACTCTCCAGCTTCAAGGTTTGGATTCAGGATTTGTTCCTAGTGTCCAAGATTTTGATAAGA GCAAAGAAGATGAACAGAGAAAGAAAATTGAAACTCTCAAAGAGACAACAAATAGCATGGTAGAATCAATTAAAC ACTGCATTGTGTTGCTGCAGATTGCCAAAGACCAGAGTAATGCGGAGAAGCACGCAGATGGAATGATAAGTACTA TTAATCCCGTAGATGCAATATATCAACCTAGTCCTTTGGAACCTGTGATCAGCACAATGCCTTCCCAGACTGTGT TACCTCCAGAACCTGTTCAGTTGTGAAGTCAGAGCAGCGTCCATCTTCCCTACCAGTTGGACCTGTGTTGGCTA CCTTGGGACATCATCAGACTCCTACACCAAATAGTACAGGCAGTGGCCATTCACCACCGAGTAGCAGTCTCACTT CTCCAAGCCACGTGAACTTGTCTCCAAATACAGTCCCAGAGTTCTCTTACTCCAGCAGTGAAGATGAATTTTATG ATGCTGATGAATTCCATCAAAGTGGCTCATCCCCAAAGCGCTTAATAGATTCTTCTGGATCTGCCTCAGTCCTGA CACACAGCAGCTCGGGAAATAGTCTAAAACGCCCAGATACCACAGAATCACTTAATTCTTCCTTGTCCAATGGAA CAAGTGATGCTGACCTGTTTGATTCACATGATGACAGAGATGATGATGCGGAGGCAGGGTCTGTGGAGGAGCACA AGAGCGTTATCATGCATCTCTTGTCGCAGGTTAGACTTGGAATGGATCTTACTAAGGTAGTTCTTCCAACGTTTA TTCTTGAAAGAAGATCTCTTTTAGAAATGTATGCAGACTTTTTTGCACATCCGGACCTGTTTGTGAGCATTAGTG GATCAGTTGCCAAAAAGCCATACAATCCCATTTTGGGCGAGATTTTTCAGTGTCATTGGACATTACCAAATGATA CTGAAGAGAACACAGAACTAGTTTCAGAAGGACCAGTTCCCTGGGTTTCCAAAAACAGTGTAACATTTGTGGCTG AGCAGGTTTCCCATCATCCACCCATTTCAGCCTTTTATGCTGAGTGTTTTAACAAGAAGATACAATTCAATGCTC ATATCTGGACCAAATCAAAATTCCTTGGGATGTCAATTGGGGTGCACAACATAGGGCAGGGCTGTGTCTCATGTC TAGACTATGATGAACATTACATTCTCACATTCCCCAATGGCTATGGAAGGTCTATCCTCACAGTGCCCTGGGTGG AATTAGGAGGAGAATGCAATATTAATTGTTCCAAAACAGGCTATAGTGCAAATATCATCTTCCACACTAAACCCT TCTATGGGGGCAAGAAGCACAGAATTACTGCCGAGATTTTTTCTCCAAATGACAAGAAGTCTTTTTGCTCAATTG AAGGGGAATGGAATGGTGTGTATGCAAAATATGCAACAGGGGAAAATACAGTCTTTGTAGATACCAAGAAGT TGCCTATAATCAAGAAGAAAGTGAGGAAGTTGGAAGATCAGAACGAGTATGAATCCCGCAGCCTTTGGAAGGATG CAGAAGCCCGAGAAAGGAAGGAAAATTCAGTGGGAGACAAGGTTATTTCATGAAGATGGAGAATGCTGGG $\tt TTTATGATGAACCATTACTGAAACGTCTTGGTGCTGCCAAGCAT{\color{red}{\textbf{TAG}}} GTTGGAAGATGCAAAGTTTATACCTGAT$ GATCAGGGCAGTAGGCATAATTCAGCAACAAACAATCTTCCTTTGGGAGAAACCTGTTCATTCCAATCTTCTAAT TACAGTGGTTCCTATCTCAGGGATACTGGACTTTCTGACGCAGATGAACAATTAAGGGGAAAAGCTTCCCTTTTC CCTCTGTGGCAGTTACGATTTTGACTTCAGTCCTGAGAAAAACTTCAGGTTTTGAAAATCAGATGATGTCTTCTC CTTTTCCAAACACCACACGTTGAAAGCATTTATAAATCCAAGTCTGAAACTCTGCGCTCTAGTACTGCTGTTAAG TATACACACATACATATATATAAATATACCTGATGCCAGATTTTTTTCATAAATATTCTGCCTACTGTAAATA TGGGTTCCTCTGAGTTGTTTTAGAAAATTAGCGCAATGTATTAAAATCAAGTGTTAGGAAATTTCATGGTCTTAC CTACAATAACTTTTATTTTGGAATTGAACTATTATTAAATTGTATCTAATCCTGGATTACAGTTTAATTATTAT

263/6881 FIGURE 248

MASIMEGPLSKWTNVMKGWQYRWFVLDYNAGLLSYYTSKDKMMRGSRRGCVRLRGAVIGIDDEDDSTFTITVDQK
TFHFQARDADEREKWIHALEETILRHTLQLQGLDSGFVPSVQDFDKKLTEADAYLQILIEQLKLFDDKLQNCKED
EQRKKIETLKETTNSMVESIKHCIVLLQIAKDQSNAEKHADGMISTINPVDAIYQPSPLEPVISTMPSQTVLPPE
PVQLCKSEQRPSSLPVGPVLATLGHHQTPTPNSTGSGHSPPSSSLTSPSHVNLSPNTVPEFSYSSSEDEFYDADE
FHQSGSSPKRLIDSSGSASVLTHSSSGNSLKRPDTTESLNSSLSNGTSDADLFDSHDDRDDDAEAGSVEEHKSVI
MHLLSQVRLGMDLTKVVLPTFILERRSLLEMYADFFAHPDLFVSISDQKDPKDRMVQVVKWYLSAFHAGRKGSVA
KKPYNPILGEIFQCHWTLPNDTEENTELVSEGPVPWVSKNSVTFVAEQVSHHPPISAFYAECFNKKIQFNAHIWT
KSKFLGMSIGVHNIGQGCVSCLDYDEHYILTFPNGYGRSILTVPWVELGGECNINCSKTGYSANIIFHTKPFYGG
KKHRITAEIFSPNDKKSFCSIEGEWNGVMYAKYATGENTVFVDTKKLPIIKKKVRKLEDQNEYESRSLWKDVTFN
LKIRDIDAATEAKHRLEERQRAEARERKEKEIQWETRLFHEDGECWVYDEPLLKRLGAAKH

264/6881 FIGURE 249A

CCCGGGCTGTGGGCTACAGGCGCAGAGCGGGCCAGGCGGGAGCTGGCGGCAGTGACAGGAGGCGCGAACCCGCA GCGCTTACCGCGCGCGCCCCATGGAGCCCGCCGTGTCGCTGTGCGCGCTGCTCTTCCTGCTGTGG GTGCGCCTGAAGGGGCTGGAGTTCGTGCTCATCCACCAGCGCTGGGTGTTCGTGTGCCTCTTCCTCCTGCCGCTC TCGCTTATCTTCGATATCTACTACTACGTGCGCGCCTGGGTGGTGTTCAAGCTCAGCAGCGCTCCGCGCCTGCAC GAGCAGCGCGTGCGGGACATCCAGAAGCAGGTGCGGGAATGGAAGGAGCAGGGTAGCAAGACCTTCATGTGCACG GGGCGCCCTGGCTGGCTCACTGTCTCACTACGTGTCGGGAAGTACAAGAAGACACACAAAAAACATCATGATCAAC CTGATGGACATTCTGGAAGTGGACACCAAGAAACAGATTGTCCGTGTGGAGCCCTTGGTGACCATGGGCCAGGTG ACTGCCCTGCTGACCTCCATTGGCTGGACTCTCCCCGTGTTGCCTGAGCTTGATGACCTCACAGTGGGGGGCTTG ATCATGGCACAGGCATCGAGTCATCCTCACAAGTACGGCCTGTTCCAACACATCTGCACTGCTTACGAGCTG TGTGGGACGCTGGGTTTCCTGGTGGCCGCTGAGATCCGCATCATCCCTGCCAAGAAGTACGTCAAGCTGCGTTTC GAGCCAGTGCGGGGCCTGGAGGCTATCTGTGCCAAGTTCACCCACGAGTCCCAGCGGCAGGAGAACCACTTCGTG GAAGGGCTGCTCTACTCCCTGGATGAGGCTGTCATTATGACAGGGGTCATGACAGATGAGGCAGAGCCCAGCAAG CTGAATAGCATTGGCAATTACTACAAGCCGTGGTTCTTTAAGCATGTGGAGAACTATCTGAAGACAAACCGAGAG GGCCTGGAGTACATTCCCTTGAGACACTACTACCACCGCCACACGCGCAGCATCTTCTGGGAGCTCCAGGACATT CTGACCCAGGGTGAGACCCTGCGCAAGCTGTACGAGCAGCACCACGTGGTGCAGGACATGCTGGTGCCCATGAAG TGCCTGCAGCAGGCCCTGCACACCTTCCAAAACGACATCCACGTCTACCCCATCTGGCTGTGTCCGTTCATCCTG CCCAGCCAGCCAGGCCTAGTGCACCCCAAAGGAAATGAGGCAGAGCTCTACATCGACATTGGAGCATATGGGGAG CCGCGTGTGAAACACTTTGAAGCCAGGTCCTGCATGAGGCAGCTGGAGAAGTTTGTCCGCAGCGTGCATGGCTTC CAGATGCTGTATGCCGACTGCTACATGAACCGGGAGGAGTTCTGGGAGATGTTTGATGGCTCCTTGTACCACAAG CTGCGAGAGAGCTGGGTTGCCAGGACGCCTTCCCCGAGGTGTACGACAAGATCTGCAAGGCCGCCAGGCACTGA GCTGGAGCCCGCCTGGAGAGACAGGTGTGAGTGGTCAGGCATCTTCCCTTCACTCAAGCTTGGCTGCTTTC CTAGATCCACACTTCAAAGAGAAACCCCTCCAGAACTCCCACCCTGACAGCCCAACACCCCTCCTCCTGGCT TCCAGGGGGCAGCCCAGTGGAATGGAAAGAATGTGGGATTTGGAGTCAGACAAGCCTGAGTCCAGTTCCCCGTTT AGAACTCATTAGCTGTGTGACTCTGGGTGAGTCCCTTAACCCCTCTGAGCCCGGGTCTCTTCATTAGTTGAAAGG GATAGTAATACCTACTTGCAGGTTGTTGTCATCTGAGTTGAGCACTGGTCACATTGAAGGTGCTGGGTAAGTGGT AGCTCTTGTTGCTTCCCGTTCAGCGTCACATCTGCAGTGGAGCCTGAAAAGGCTCCACATTAGGTCACCTGTGCA CAGCCATGGCTGGAATGATGAAGGGGATACGCTGGAGTTGCCCTGCCATCGCCTCCATCAGCCAGACGAGGTCCT CACAGGAGAAGGACAGCTCTTCCCCACCCTGGGATCTCAGGAGGGCAGCCACGGAGTGGGGAGGCCCCAGATGCG CTGTGCCAAAGCCAGGTCCGAGGCCAAAGTTCTCCCTGCCATCCTTGGTGCCGTCCTGCCCCTTCCTCATG CCTGGGCCTGCAGGCCCACCCAGCCACCACTGAGTCCACTCGGAGTGCCCTGTGTTCCTGGAGAAGGCATTCCA GGGTTGAATCTTGTCCCAGCCTCAGCCTGGGACACCTAGGTGGAGAGAGTGGTCTCCGCTCTGAATTGGATCCAG GGGACCTGGGCTCATTCTTCTTGGCTCACCAACCCTGCAGGCCTCATCTTTCCCAAAACCCACTTTGTCTTGGTG GGAGTGGGTCCGCGCTGCTCTGCAGCAGGGGCTGGGGAGTGGACAGCATCAGGTGGGAAAGTGGAGTCCACCCTC ATGTTTCTGTAGGATTCTCACCGTGGGGCTGGAAGAAAAGAGCATCGACTTGATTTCTCCAACCACTCATCCCTC TTTTTCTTCCACCACCCCCACCCCAGCTGTAGTTAATTTCAGTGCCTTACAAATCCTAAGCTCAGAGAAA GTTCCATTTCCGTTCCAGAGGGAAGGGAACCTCCCTAGGTCCTTCCCTGGCTTGTTATAACGCAAAGCTTGGTTG TTTATGCAACTCTATCTTAAGAACTGCCCAGCCTCAGCTGAAAACCCGAATCTGAGAAGGAATTGCGTCATGTAA GGGAAGCTGGAATTAAGGGAGCTGAGCCAGTCATGGTTGTGGCGTGTGAGTCAGGAGACCTAGGTTTCAGCCCCT CTCTACTGTCAGCGAGCTGTGCAACGTGGGCAAGTCATTGTCCTCTGAGCTGCAGTTTCCTCATCTGTCACATCG CTACAGACAAGACCTCCCTGGAACCCTTCTGATTGTCTTAGACACTGTGGTTGCAAAACCCACGGAAAGCCTCAT TTGTGTGGAAAGTCAGAGGAAAAATGATCCAGTGGACACTTGGGGATTATCTGTCATTCAAGATCCTTCCAA CCCCAAGGTCAGCTCCCATCTCATTTCCAGAAAGGCTCATACCTGGCTTGCAGGGAAGCATCTGTCTTGTCATTC CTTAGCAGGGTCTTGTGAGGGCTGGGGGCATCCAGGCACTCAGAAGGCAAAGGAACCACCCTACCCATTTGGCCT CTGGAGGGGCAGAAGAAAGAATAAACCTCATCCTATATTTTACAAAGCATGTGAATTCTGGCATTAGCTCTCA TAGGAGACCCATGTGCTTCCTTGCTCAGTGCAAAACTGATGATTCTACTTGCTGTAGATGAATGGTTAACACGAG

265/6881 FIGURE 249B

266/6881 FIGURE 250

GACATCATGGGCTATTTTTAGGGGTTGACTGGTAGCAGATAAGTGTTGAGCTCGGGCTGGATAAGGGCTCAGAGT CCAGCCAGGTCGGCAGTATAGTCCGAACTGCAAATCTTATTTTCTTTTCACCTTCTCTCTAACTGCCCAGAGCTA GCGCCTGTGGCTCCCGGGCTGGTGTTTCGGGAGTGTCCAGAGAGACCTGGTCTCCAGCCGCCCCCGGGAGGAGAGC CCTGCTGCCCAGGCGCTGTTGACAGCGGCGGAAAGCAGCGGTACCCACGCGCCCGCGGGGAAGTCGGCGAGCG GCTGCAGCAGCAAAGAACTTTCCCGGCTGGGAGGACCGGAGACAAGTGGCAGAGTCCCGGAGCCAACTTTTGCAA ACGTGCGCTCAGCTTCGCTCGCACCGGTTGTTGAACTTGGGCGAGCCGCAGCCGCGGCTGCCGGGCGCCCCCTCC TCCGCACTGATCCGCTCCGCGGGGAGAGCCGCTGCTCTGGGAAGTGAGTTCGCCTGCGGACTCCGAGGAACCGCT GCGCACGAAGAGCGCTCAGTGAGTGACCGCGACTTTTCAAAGCCGGGTAGCGCGCGGGGTCGACAAGTAAGAGT CGGGTGCGTGCGCTCTTAGAGAAACTTTCCCTGTCAAAGGCTCCGGGGGGGCGCGGGTGTCCCCCGCTTGCCACAG CCCTGTTGCGGCCCGAAACTTGTGCGCGCAGCCCAAACTAACCTCACGTGAAGTGACGGACTGTTCTATGACTG CAAAGATGGAAACGACCTTCTATGACGATGCCCTCAACGCCTCGTTCCTCCCGTCCGAGAGCGGACCTTATGGCT ACAGTAACCCCAAGATCCTGAAACAGAGCATGACCCTGAACCTGGCCGACCCAGTGGGGGAGCCTGAAGCCGCACC TCCGCGCCAAGAACTCGGACCTCCTCACCTCGCCCGACGTGGGGCTGCTCAAGCTGGCGTCGCCCGAGCTGGAGC TGACAGATGAGCAGGAGGGCTTCGCCGAGGGCTTCGTGCGCGCCCTGGCCGAACTGCACAGCCAGAACACGCTGC GCAGCGGCAGCGGCGCTTCAGCGCCAGCCTGCACAGCGAGCCGCCGGTCTACGCAAACCTCAGCAACTTCAACC AGCAGCAGCAGCCGCCCCCCCCCCCCCCAGCAGATGCCCGTGCAGCACCCGCGGCTGCAGGCCCTGAAGGAGG AGCCTCAGACAGTGCCCGAGATGCCCGGCGAGACACCGCCCTGTCCCCCATCGACATGGAGTCCCAGGAGCGGA TCAAGGCGGAGAGGAAGCGCATGAGGAACCGCATCGCTGCCTCCAAGTGCCGAAAAAGGAAGCTGGAGAGAATCG CCCGGCTGGAGGAAAAGTGAAAACCTTGAAAGCTCAGAACTCGGAGCTGGCGTCCACGGCCAACATGCTCAGGG AACAGGTGGCACAGCTTAAACAGAAAGTCATGAACCACGTTAACAGTGGGTGCCAACTCATGCTAACGCAGCAGT GAGAACTTGACAAGTTGCGACGGAGAGAAAAAAGAAGTGTCCGAGAACTAAAGCCAAGGGTATCCAAGTTGGACT GGGAGCGCCCCCCCGCTTTGCGGACGGCTGTCCCCGCGCAACGGAACGTTGGACTTTTCGT TGTATGTACATATATTTTTTTAATTTGATGAAAGCTGATTACTGTCAATAAACAGCTTCATGCCTTTGTAAG AATAAACTATTGGAAAGTACTCCCCTAACCTCTTTTCTGCATCATCTGTAGATACTAGCTATCTAGGTGGAGTTG AAAGAGTTAAGAATGTCGATTAAAATCACTCTCAGTGCTTCTTACTATTAAGCAGTAAAAACTGTTCTCTATTAG GGAATTGCTTACCAAAGGATAGTGCGATGTTTCAGGAGGCTGGAGGAAGGGGGGTTGCAGTGGAGAGGGACAGCC CACTGAGAAGTCAAACATTTCAAAGTTTGGATTGTATCAAGTGGCATGTGCTGTGACCATTTATAATGTTAGTAG AAATTTTACAATAGGTGCTTATTCTCAAAGCAGGAATTGGTGGCAGATTTTACAAAAGATGTATCCTTCCAATTT GGAATCTTCTCTTTGACAATTCCTAGATAAAAAGATGGCCTTTGCTTATGAATATTTATAACAGCATTCTTGTCA CAATAAATGTATTCAAATACC

267/6881 FIGURE 251A

GTTAACAAAAGGATTAATGGGTTGCTTAAATTAGTGAGCTTCATCAGTTTTATTTTTAATTCCTTGAGATAATGA ATTTTAAAAGCAATAAATACAATGCTGTAGTTTTTGACTTCTTTTCTAAATATTTACATGGATTTACATGAAAGA ACTAAAGAGATAGTATTTGTGGAACCAATTTAAACTCTTACATGCCTTTCAGGATTTGGGAATGTATTAACACCT CCCTCACTCAGACCCAAGGATTATGTCTTTTGGGGCTCCCATCATCCTGAGCTAGAGACACGTGACAGGGGTACA CTCTCCTACAAAACCAGCCAGTTACTCAGTAAAGTGGACGATAGAAGAAAAAGAGCTGTTTGAACAAGGGCTGGC TAAATTTGGCCGAAGATGGACCAAAATTTCAAAGCTAATTGGAAGCCGCACTGTTTTACAAGTGAAGAGTTATGC AAGACAGTATTTTAAAAATAAGGTCAAATGCGGTCTGGATAAAGAAACACCAAATCAGAAGACCGGCCATAATCT TCAAGTTAAAAATGAAGATAAAGGGACAAAGGCATGGACACCATCATGTTTAAGGGGACGTGCTGATCCCAACTT GAATGCTGTAAAAATTGAAAAGTTATCTGATGATGAAGAAGTAGACATCACAGATGAGGTGGACGAGTTGTCTTC TCAAACACCCCAGAAGAATTCTAGCAGTGATCTCTTGTTAGACTTTCCTAATAGTAAAATGCATGAAACCAATCA AGGAGAATTCATTACTTCTGACAGCCAGGAAGCTCTCTTTTCTAAGTCTTCCAGGGGCTGTCTTCAAAATGAAAA GCAAGATGAAACACTTTCAAGCTCAGAAATTACACTGTGGACTGAGAAACAGAGCAATGGTGACAAAAAATCAAT TGAATTAAATGACCAGAAATTTAATGAATTGATTAAAAACTGCAACAAGCATGATGGAAGGGGAATAATAGTTGA TGCCAGGCAGTTGCCTTCTCCAGAGCCTTGTGAAATTCAGAAAAATTTGAATGATAATGAAATGCTTTTTCATTC TATCATTCAAGAAGAAGAAAACAAGCAATTCCTGAGTTTTTTGAGGGGCCCCAAGCTAAAACACCAGAACGCTA TTTGAAAATTAGAAATTATATTTTGGATCAATGGGAGATATGCAAACCAAAATACTTAAATAAGACCTCAGTACG TGCAGTAGAAGCATACCAACTTGCCCAGCGTCTGCAGTCTATGCGTACAAGGAGACGTAGGGTCCGAGACCCATG GGGAAACTGGTGTGATGCAAAGGACTTAGAAGGACAAACGTTTGAGCATCTCTCTGCTGAGGAGTTGGCAAAAAG AAGAGAAGAGGAAAAAGGCAGACCTGTTAAATCTTTAAAAGTGCCAAGACCAACAAAAAAGCTCGTTTGATCCCTT TTTAATAATGGATTTGCATGCTCATGTTTCTATGGCAGAAGTGATTGGTCTGTTAGGAGGAAGATACTCAGAAGT TGATAAAGTAGTTGAAGTCTGTGCAGCAGAACCATGTAACAGTCTGAGTACAGGACTACAGTGTGAGATGGATCC TGTATCACAAACACAGGCCTCAGAAACCTTGGCTGTTAGAGGCTTCAGTGTTATTGGATGGTATCATTCTCATCC TGCTTTTGATCCTAATCCTTCCTTACGAGATATTGACACAAGCTAAATACCAGAGTTACTTCTCCAGAGGAGG TGCAAAGTTCATTGGGATGATTGTTAGTCCCTATAATCGAAATAATCCCTTACCATATTCTCAGATTACCTGCCT GGTTATAAGTGAGGAAATTAGCCCAGATGGCTCTTATCGCTTACCATACAAATTTGAAGTACAGCAGATGTTAGA AGAACCTCAGTGGGGATTAGTATTTGAAAAGACAAGATGGATAATAGAAAAATACAGGCTCTCCCATAGCAGCGT TCTGAGCAAAGTGACCAATTGCTTTATGGCTGAAGAATTCTTGACTGAAATAGAAAATTTGTTCCTTTCCAATTA TAAAAGCAACCAAGAGAATGGAGTAACCGAAGAGAACTGTACAAAGGAATTGTTAATGTGATTATTTTAAAGTTA AGACATTTTAATCTTGACACAGTAGATCTTACTTTCAAAGTTATAAACTTGAAGTGATTGTAGTTAACATTGGCA CAGCTTTGGTATTTTCTCTATTTCACAAAATCCAAACTTTGCCACATAAATCATGTGAAAAGGAAGAGATACA **AATTTGTTTTCATATAGTGATTATCAGAGTGTTCTGCAAACCAGGGTCCACCACGGTGTTCTAGTCCTTTACTGA** GCAATGCTGTAGGCTGTGAAACTAAGCAACCTGGTCGGCTTTACTGTTGTTCTGCTTGGGGTTTGGACTATGT CTCTAAGTCATTTCTTCCCTGAACTAGTCATTTATGTTCCATTGTGGTATCTCCTATTTCATTTAAAAGCACTTC TAATATGGTTTAGAACTACTGATTAATAAATCTAACAGGAGACCAGGAGAGGCATGACAAGAAAATCTTAAAAAC AGGAAAAACCCAAAGGAGAACTAAATTACCAGTTTCTAATCATAGATACTATCTTCCATTTCATTGTATAGCA GTAGTATCATAAGATATGCCATTTTCTCAGCTATCTGAAAATTTTTAACCAATTTTACACACATAAAATAATTAG CTTCAATTGTGAGTCCACTTACATTAGTAGGTGTGATAAAACCTCATTTAACTGGAACATAGGTAATCATAACTC AAACTTTTTTCTACTGCCTACTACTAGGAGAAAGAGGCAAATGATAATAAAGCTGGAATAAATCAGAGATTTAA TTTTTAAAACAAGCCTTTCAGGACATGTTACATATTCAGCCCAGTTTCATATGCTTTCTGAATCTATAATGGAGG TCAGTGAACTTTTTTAATGTAAAGGGCCAGTTTGTAAATAATTTTGGCTTTTCAGGCCACATATGATGTCTATGA

FIGURE 251B

 ${\tt CCATTGTTAACTCACAGGCCTCATAAAACATAGGCTGTTGGCTATTATTCTCCAACCCTTGATCTAGAGAATTTT}$ AAACATTAGAATTTTGTTTACATTTGTTAAGCTTTACGTCATCTTCAAATGACACCCAAAACTCAGAATTATGAT CTGCATTTAAGCCAATTTTAAAATAAAATAAGCAGTCAATGCTGCCTCATTTATTGAAAATTCAGTAGATTTTAGT TTATTTCTTAGTAGTCAGAGAATTGATTTATAGCTATTCACCAAACATTCTTACTAACGTTTCCTTATATCTAAA TCAGATTGATTCTATATTTTGCTTTGTTATCAATAGCCAATGAAGAATAAGGAGTATTGGAAGAAGCAGTG AGTCAGCTTTAGGTGACCTGGTTCTTGTCTCAACTTTGTGATTTGGGGAGATACAGTTTACTTTCCCTGAGCCTT AATTCTTGTGTAACTGAAGTCTAACTTAACTTCTTAATGTCCTTCCAGAACTAAAATTTTATTGTTCATTCTAAT GGTAGTATTTTTCCATTTCTCTGTGTGCACTTAGGATAAACAGTGAAGTATAGCTTATAAAACAATTAGTTTGAG GGCTGAGAGTGTAAGAGGAACTATACCAAAAGTCAGGAAACCTGAGCTCTTACCCTAACTCTGTTACCAACTTTG CTGTGTGACCTTAATCAAAACACATAACCTGGACCCCATGCTCCTCACCAGTAAATCAAGGGCCTGAATTTIATG TCCTTTTGACCTGTTTCCTCATGATATATTGGGGAACAAATACTAAAAAGTGTTTTATACTAGCTTTCTTGATTG ACATTTCCCTATAATACTGATGAATTTGGGTGATGGAAAGTAATGGAAATTGTTAAAAGTTCTGCTCTCAAATCT GAGTCTCCTTGCCCTGTGTGCCAATGTTTAACCATATTTGCTAATCTAAGCCATATTGCGAGGATCTCAAGGATG ATACTTGTCAAGAGTTTGGGGCCTTGAGAGCACAGTTTTCAAAATAATACTTAGTATTTTCTGACTATAGAGTAC ATTTGTCTTGTAAAGTATATTTTAAAATACAGAGAAGTGTGAAGTACAAATATCTCAGTGCTACTATTTAAAAAA ACACAATTAGTATATAAATCCTTCCCCATTTTTTTGACAGTATAATTTTAGTATGTTAAACTTGGTTACTTCTTT CTCTCTTCCTCCATCATTTTCCCTGCTTCCTTTTTCTTTTTCTCATATTCTTAAAACAATTTTGCAACCACAGGTA ${\tt AAGTCTAGAACTGAGGGGGCCTATGATACAGGAAGTTCAGGAGGCAGAGTCTCAAAGGAACACCTGCCTTTAATA}$ ATCTTTACAGAAGTGGAGAAAGGACTAAAGGACTTAAAGACATGCAGGTGTCTTCATCCTGATTCTGTCTTTGTT CTTCCCCAGTATTAGACTTAATCTAATTCCAAAGTAACATTCAAGAAAAGAAAAACCAGTGGAACAGGATCAGTA AGCTCAGACTCTCCATTCTTTAGCCTTGACCATTCTTCTCTAATCCTTTTAAATTATCTTCAGTTTCC AGTTCAAGTTACATTGCTTCAGTTACAGTTTGTTTGACCCTGTATTCAGAGCTGCATTATGATTCTTGTGGGCCC TAGATAGTTTTGCCATCTTAGACCCCTTCTTCCATACAAAATTAAAAGTGATATTTTACAATTGTATCTGTATGA TAAAACATTTTTGTGGGCTTCTAAAAAACTGTGGGCCTTAGGTACTGTGCCTAATGGATAAGTTGGCATTGCCTG TATTCTGAAGGGCATCATTGGAAAAATAGCAGTCATTATTCTGTCCCCTTCTCCCACCACCACAGTCCTTGGAGA AGTCTTCAGATATTTTTGTTTTGGTCAGTCCCTAATCTGTAGTTTTGAAACTCGTGCCACACTTGAAAGGGAAAC CAGCATATAAATACAAGACCCTTCTTTCTATTATTTGTTGAAAGCTAGGCCTGTAAAATAGAGATGGACAGACCA GGGGTTGAGGTCTGTGACATGCAGACTGTAAGCACAGTCAGAACCTCTGCAGCTCTCAACCCAACAGAGGAGACT GTGGCTTCAACATGCCAACCTGAGCAGGTCTCCTCTGCATTACCTTCCTCCCATTTCTCTTCCTGGGTCCTGATG AGGTGAGCTGGAGGAACCAATAGTCAGGATGCCCTGGAATTGATGTTGCTCTGTTTTTGTGCTCACAAAACAGCCA TGTAACACATGAGCACCTGAGTTGAAGCCATCCAGTCGCAAGTCAGCAGACAGCAGTTGATGGAATTCTCAGTAG AAATTCAGTAAGGGTGCCCAAATTTTATTTTTTTTTTCACCTATACTCTACCAATATATGGTATTTAGGAAAACT ACAAATTTGATCAGCATCTCTAGTTTACCAGTACTTTAATATTAGTTTTCTTACAAATTAATGTATTTTGCAATA TTTCCAGAAAATCACTGTGGGAGAATAATGTAATATACTTTAGGATATATTTCCTGACCTTTTCTTAAATGGCTT CAGGAAAAAATAAAAATATCCCAGGGGAGCTGTGATTATGCCAAGAGCTCTAAACAGAAGTTTGAGAAGGTAAAA ATTAAGTTGTAGTATCTGAGTTGTTTTTATTTTCTTCCTTTGGTGTTTTATGAAGGTATTCATAAGAACTTTAATT

269/6881 FIGURE 251C

TCAGGGGAAAAAATGCCTGATTTGCTATTTTTGACATTTCCTCGTCTCTTAAGAAGTCAGTTAAATATGTTTTC
ATAGTTTATATTCCTGTTTCATAGATTACTGTGAAACATGTATTTAAACCTATGAATTATAAAATAGTATTTAGA
TTCTAGCGTGAGTTAAATAGATTAGTCATATATCTTTTTAGATTTGTGGATTTGACATGTAAATTATGTGTTGTG
ATAAGTAAGTTAGTTACTAAACATATGGCATGGTTATTGATAAACTTGTTGCTATTTTTTCCAAATGCTATCAG
TGTTTGTGGACTTTTAAAAATTAGTTTGAATTTTGGAATGTTCTGTGATAAAATGTAATTTCAACTATTTTGTAC
ATTTAAATATGCCATGTTGTATATGTCTGTATTTAAAAATGTTGTAAATACCTGCATTTTAAGAATTATGGAAAGA
TTTTCCTCAAAAAATGACAGAACTCTCCATACTTAATTGTGACACATTATAAGATATCTGATTTTAAACATTATGGA
TTTTGTTCTAAAAATTAAGTTTAAACATGCTGAAAAATCCATAAAAATAAAATTTTGAAAATAAA

270/6881 FIGURE 252

MHETNQGEFITSDSQEALFSKSSRGCLQNEKQDETLSSSEITLWTEKQSNGDKKSIELNDQKFNELIKNCNKHDG
RGIIVDARQLPSPEPCEIQKNLNDNEMLFHSCQMVEESHEEEELKPPEQEIEIDRNIIQEEEKQAIPEFFEGRQA
KTPERYLKIRNYILDQWEICKPKYLNKTSVRPGLKNCGDVNCIGRIHTYLELIGAINFGCEQAVYNRPQTVDKVR
IRDRKDAVEAYQLAQRLQSMRTRRRRVRDPWGNWCDAKDLEGQTFEHLSAEELAKRREEEKGRPVKSLKVPRPTK
SSFDPFQLIPCNFFSEEKQEPFQVKVASEALLIMDLHAHVSMAEVIGLLGGRYSEVDKVVEVCAAEPCNSLSTGL
QCEMDPVSQTQASETLAVRGFSVIGWYHSHPAFDPNPSLRDIDTQAKYQSYFSRGGAKFIGMIVSPYNRNNPLPY
SQITCLVISEEISPDGSYRLPYKFEVQQMLEEPQWGLVFEKTRWIIEKYRLSHSSVPMDKIFRRDSDLTCLQKLL
ECMRKTLSKVTNCFMAEEFLTEIENLFLSNYKSNQENGVTEENCTKELLM

271/6881 FIGURE 253

272/6881 FIGURE 254A

GAGCTTGCGAAGGCAGCAGGAGAAAACCTCTGAGCTGTTTTTGCCCAGTGTCCACAGAGGGTTAGGAGGA ${\tt CCCAATGAAGGAATGACCCTGAAATGTGAACAGGGCGAAGAACTAGGCCCCAGCTCCCTGCAGAGAAGATACATC}$ AAAGCCCCACATGAGGATTTTTATAGCTCCACATTGGACAAGCTTCCTCTCTGAGATAGAGCCTACAGGGAAG GGACAGATTTGGGGCAAGGAGGAGTCTGAAAGAGATGGGGTACGCCGTAGTGAAAGCTGGAGTGAGAGCCTTC GTATTCGAAGGCGGGACTCGGGCGCTGTTGGCAGCTGGCGACGCGGGGCGAAGCCGCGGCTGGCGCGCCTGGC CAGTCCCGCATCCGCCGCGCGCCCCGGAGGTTGCGTGCGCTCCGAAGCCGGGGTGTGCGCCTAGCTGCCCCGGC CCCGTGCACCGCGGGCCGCCTCGCCAGGACTTCCGCAGCCTCGCCAAGCCTGGGGTCTGCGACAGAAAAGGAGCG GGGCTGCTCGGGCTGCCCAAAGGGTCATGGTTATTAAGGAAGAAAACACAGAATGGGCCCTTGTATGGACTCTAT TACCAAGTGCCATTGGACACGCAGGCAGTGTACTGGGAGACAGTCGTGGTGTGCTCAGAGGTATTGCCACGGCCT GAAGTTCCTCTTGGCCGCAGCTGCCCCCACTCTGCTGCAATCTTCTGGGGAGGGCTTCACCTGCCACTGCCTC CTGCATGCCAGCATCGCCTGCTGCAGACTGCAGAGCTGGGGTGCCAAAGACCAGTCCTCTCAGGGGGATGAAGAG AAAGACCCTCCGAAGAGCCACCCTTATTCTGTGGAGACCCCATATGGCTTTCATTTAGACCTGGACTTCCTCAAG TATGTGGATGACATCGAGAAGGGAAACACTATCAAAAGAATTCCTATCCACAGAAGGGCCAAGCAGGCCAAATTT CAGGCCTCAACAAGCAGGAGTGAGGTGAGCTACCACAGGAAGGCTCTGTTGGCAGAGGCCACCAGACAGTTGGAA GCTGCTGAGCCAGAGGATGCCGAGCTCACTTTTGGGAGTGGACGGCCCCAGCTCTTGAGAGCATCCAGCATGCCT CCCCTTCAGGGTGAAGGCAGTGTCTGTGATGGCACCTTTGAACCTGCAGAAGGATTGGCAGGTTTCCACAGCTCC CCAAATCACCTCCCTCTCCCAGGCCCTCCTTTCTCATTCCAGAATGTGCTTGTAGTTCTAGAGGACAAGGAAGAT GAACACAATGCCAGAGAAGCAGAGGTGTTGTTCACCCCTGGCTCCCCTACGCCAAGCCCGCCACCTCTGCCATCA CCCATCCTGAGAATGAGCTCTCCTGGAAGAAATCGAGCTCAACATCAGCGAGATTCCACCCCCGCCACCTGTA GAGGTGGACATGAGAAGCATTGGCATCAGGGTAACTGAGGAAAGCCTGGGCCTTGCCAGGGTGGATCCAGGCAGC AGAACTGCTCTCCAGCAGCAGGAAGAGGAAATCAAAGCTAGGGAGCAAAGAATTCGAGAGCTGGAGTTCACTGTA GACCCTGTCCATGGACTCTTGACCAGGGAGTCGTGTGATAAGGGCATTGAAGTCAACCTTCTAGGCAGCATGGAG TCTGAAAGCTGGGGGCACCGAGGAGAGGAGAATGGCCTCCTATGGGGGCCAGATGGTCATAAACAAGGGAATCAG AGCCCAGCAGAACGTGTGCTTCTGCCCCAGCTGTCACTGCCACAGGGACCCGAGCAGGTCCTTACCTCCTCTGTA CTCCCAGGGAAGGACCCCGGGAAGGCCACCAAGCTCGCCAACGGATGCCACTATTGGGCAGTATGTGAAGAAG ATCCAGGAGCTCCTGCAGGAGCAGTGGAACTGCCTGGAGCATGGGTACCCGGAGCTGGCCAGCGCCATCAAGCAG CCAGCCTCCAAGCTCAGCAGCATCCAGAGCCAGCTGCTGAGCTCCCTCAACCTGCTGCTGTCGGCCTACTCGGCC CAGGCTCACCCACCCAAGGAGCCACCGGCCTCCTCCTCCTCCCGCCAGTGGAGATCTCCCCATCGACCAGCCTT AAATCCATAATGAAAAGAAAGACTATGGCTTCCGTGCAGGAGGTAATGGGACCAAAAAGAACCTTCAGTTTGTT GGGGTTAACGGTGGGTATGAGACCACCTCAAGTGAGGAGACCAGCGGTGAGGACAGCACCCCAGAGGACTTGTCT GACAGCGAGGCAGAGAAGAAGTGTGACGGCCCAGATCACAAGCATGTCAAAGATGCCCATCTCACCTGCGAGGCT GGGCAGGCATCCCTGAGGGCACCTGCCATGCTGCCCAGGAAAGTGGGCCTGGGGAAGAAGTCCCCCACTCCAAG GCCGAGAGCCGGAAGTCGTCTAGCCCCGCCGTGGTGGCCTCCTACCTCCACGAGGTCCAGCCTCACTCCCCACAC TTCCTGAAACTGCTTGTCAACTTGGCCGATCACAACGGGAACACGGCCCTTCACTACAGCGTGTCCCAACTCCAAC TTCTCCATCGTGAAGCTGCTGCTGGAGACAGGCGTCTGCAATGTGGACCATCAGAACAAAGCTGGCTACACTGCC GTAATGATCACTCCCTTGGCTTCCGCAGAGACCAATGAAGACATGGCTGTTGTCTGGAAGCTCTTAAGAGAAGGA AATGTGAACATTCAAGCTACTCAGGGAGGCCAGACTGCGCTGATGCTGGGAGTCAGCCACGACAGGGAGGACATG GTTCAAGCGCTGCTTAGCTGCCAGGCAGATGTCAATCTGCAGGACCACGATGGATCCTCGGCCCTCATGGTGGCC

273/6881 FIGURE 254B

274/6881 FIGURE 255

 ${\tt MASVQEVMGPKRTFSLLGLTVGMRPPQVRRPAVRTAPQRTCLTARQRRSVTAQITSMSKMPISPARLGRASLRAPALPRKVGLGKKSPTPRPRDINPQKNFLMHAGH}$

275/6881 FIGURE 256A

GCGGCGGCGGGAGTATCCTGGAGCTGCAGACAGTGCGGGCCTGCGCCAGTCCCGGCTGTCCTCGCCGCGACC CCTCCTCAGCCCTGGGCGCGCACGCTGGGGCCCCGCGGGGCTGGCCGCCTAGCGAGCCTGCCGGTCGACCCCA GCCAGCGCAGCGACGGGGCGCTGCCCTGGCCCAGGCGCACACGGAAGTGCGCTTCTCTGAAGTAGCTTTGGAAAGT AGAGAAGAAAATCCAGTTTGCTTCTTGGAGAACACTGGACAGCTGAATAAATGCAGTATCTAAATATAAAAGAGG ACTGCAATGCCATGGCTTTCTGTGCTAAAATGAGGAGCTCCAAGAAGACTGAGGTGAACCTGGAGGCCCCTGAGC CAGGGGTGGAAGTGATCTTCTATCTGTCGGACAGGGAGCCCCTCCGGCTGGGCAGTGGAGAGTACACAGCAGAGG AACTGTGCATCAGGGCTGCACAGGCATGCCGTATCTCTCCTCTTTGTCACAACCTCTTTGCCCTGTATGACGAGA ACACCAAGCTCTGGTATGCTCCAAATCGCACCATCACCGTTGATGACAAGATGTCCCTCCGGCTCCACTACCGGA AGAAAAATGGCTACGAGAAAAAAAAGATTCCAGATGCAACCCCTCTCCTTGATGCCAGCTCACTGGAGTATCTGT TTGCTCAGGGACAGTATGATTTGGTGAAATGCCTGGCTCCTATTCGAGACCCCAAGACCGAGCAGGATGGACATG ATATTGAGAACGAGTGTCTAGGGATGGCTGTCCTGGCCATCTCACACTATGCCATGATGAAGAAGATGCAGTTGC TTCTCACCAGGATGCGGATAAATAATGTTTTCAAGGATTTCCTAAAGGAATTTAACAACAAGACCATTTGTGACA GCAGCGTGTCCACGCATGACCTGAAGGTGAAATACTTGGCTACCTTGGAAACTTTGACAAAACATTACGGTGCTG AAATATTTGAGACTTCCATGTTACTGATTTCATCAGAAAATGAGATGAATTGGTTTCATTCGAATGACGGTGGAA ACGTTCTCTACTACGAAGTGATGGTGACTGGGAATCTTGGAATCCAGTGGAGGCATAAACCAAATGTTGTTTCTG TTGAAAAGGAAAAAATAAACTGAAGCGGAAAAAACTGGAAAATAAACACAAGAAGGATGAGGAGAAAAAACAAGA TTAACAAGCAGGACAACAAGAAATGGAACTGAAGCTCTCTCCCACGAGGAGGCCTTGTCCTTTGTGTCCCTGG TAGATGGCTACTTCCGGCTCACAGCAGATGCCCATCATTACCTCTGCACCGACGTGGCCCCCCGTTGATCGTCC AGGAGGGGATGTACGTGCTGAGGTGGAGCTGCACCGACTTTGACAACATCCTCATGACCGTCACCTGCTTTGAGA AGTCTGAGCAGGTGCCAGAAGCAGTTCAAGAACTTTCAGATCGAGGTGCAGAAGGGCCGCTACAGTC TGCACGGTTCGGACCGCAGCTTCCCCAGCTTGGGAGACCTCATGAGCCACCTCAAGAAGCAGATCCTGCGCACGG ATAACATCAGCTTCATGCTAAAACGCTGCTGCCAGCCCCAAGCCCCGAGAAATCTCCAACCTGCTGGTGGCTACTA AGAAAGCCCAGGAGTGGCAGCCCGTCTACCCCATGAGCCAGCTGAGTTTCGATCGGATCCTCAAGAAGGATCTGG TGCAGGGCGAGCACCTTGGGAGAGGCACGAGAACACATCTATTCTGGGACCCTGATGGATTACAAGGATGACG AAGGAACTTCTGAAGAGAAGAAGATAAAAGTGATCCTCAAAGTCTTAGACCCCAGCCACAGGGATATTTCCCTGG CCTTCTTCGAGGCAGCATGATGAGACAGGTCTCCCACAAACACATCGTGTACCTCTATGGCGTCTGTGTCC GCGACGTGGAGAATATCATGGTGGAAGAGTTTGTGGAAGGGGGTCCTCTGGATCTCTTCATGCACCGGAAAAGCG ATGTCCTTACCACCACGAGAAATTCAAAGTTGCCAAACAGCTGGCCAGTGCCCTGAGCTACTTGGAGGATAAAG TCATCAAGCTCAGTGACCCCGGCATCCCCATTACGGTGCTGTCTAGGCAAGAATGCATTGAACGAATCCCATGGA TTGCTCCTGAGTGTGTTGAGGACCTCCAAGAACCTGAGTGTGGCTGCTGACAAGTGGAGCTTTGGAACCACGCTCT GGGAAATCTGCTACAATGGCGAGATCCCCTTGAAAGACAAGACGCTGATTGAGAAAGAGAGATTCTATGAAAGCC GGTGCAGGCCAGTGACACCATCATGTAAGGAGCTGGCTGACCTCATGACCCGCTGCATGAACTATGACCCCAATC AGAGGCCTTTCTTCCGAGCCATCATGAGAGACATTAATAAGCTTGAAGAGCAGAATCCAGATATTGTTTCAGAAA AAAAACCAGCAACTGAAGTGGACCCCACACATTTTGAAAAGCGCTTCCTAAAGAGGATCCGTGACTTGGGAGAGG GCCACTTTGGGAAGGTTGAGCTCTGCAGGTATGACCCCGAAGGGGACAATACAGGGGAGCAGGTGGCTGTTAAAT CTCTGAAGCCTGAGAGTGGAGGTAACCACATAGCTGATCTGAAAAAGGAAATCGAGATCTTAAGGAACCTCTATC ATGAGAACATTGTGAAGTACAAAGGAATCTGCACAGAAGACGGAGGAAATGGTATTAAGCTCATCATGGAATTTC TGCCTTCGGGAAGCCTTAAGGAATATCTTCCAAAGAATAAGAACAAAATAAACCTCAAACAGCAGCTAAAATATG CCGTTCAGATTTGTAAGGGGATGGACTATTTGGGTTCTCGGCAATACGTTCACCGGGACTTGGCAGCAAGAAATG TCCTTGTTGAGAGTGAACACCAAGTGAAAATTGGAGACTTCGGTTTAACCAAAGCAATTGAAACCGATAAGGAGT ATTACACCGTCAAGGATGACCGGGACAGCCCTGTGTTTTGGTATGCTCCAGAATGTTTAATGCAATCTAAATTTT ATATTGCCTCTGACGTCTGTCTTTTGGAGTCACTCTGCATGAGCTGCTGACTTACTGTGATTCAGATTCTAGTC CCATGGCTTTGTTCCTGAAAATGATAGGCCCAACCCATGGCCAGATGACAGTCACAAGACTTGTGAATACGTTAA

276/6881 FIGURE 256B

AAGAAGGAAAACGCCTGCCGTGCCCACCTAACTGTCCAGATGAGGTTTATCAACTTATGAGGAAATGCTGGGAAT TCCAACCATCGAATCGGACAAGCTTTCAGAACCTTATTGAAGGATTTGAAGCACTTTTAAAATAAGAAGCATGAA TAACATTTAAATTCCACAGATTATCAAGTCCTTCTCCTGCAACAAATGCCCAAGTCATTTTTTAAAAATTTCTAA TGAAAGAAGTTTGTGTTCTGTCCAAAAAGTCACTGAACTCATACTTCAGTACATATACATGTATAAGGCACACTG TAGTGCTTAATATGTGTAAGGACTTCCTCTTTAAATTTGGTACCAGTAACTTAGTGACACATAATGACAACCAAA ATATTTGAAAGCACTTAAGCACTCCTCCTTGTGGAAAGAATATACCACCATTTCATCTGGCTAGTTCACCATCAC AACTGCATTACCAAAAGGGGATTTTTGAAAACGAGGAGTTGACCAAAATAATATCTGAAGATGATTGCTTTTCCC AATTTCAGTATCTATACAGTACTAGACCATGCATTCTTAAAATATTAGATACCAGGTAGTATATATTGTTTCTGT ACANANATGACTGTATTCTCTCACCAGTAGGACTTANACTTTGTTTCTCCAGTGGCTTAGCTCCTGTTCCTTTGG GTGATCACTAGCACCCATTTTTGAGAAAGCTGGTTCTACATGGGGGGATAGCTGTGGAATAGATAATTTGCTGCA TGTTAATTCTCAAGAACTAAGCCTGTGCCAGTGCTTTCCTAAGCAGTATACCTTTAATCAGAACTCATTCCCAGA ACCTGGATGCTATTACACATGCTTTTAAGAAACGTCAATGTATATCCTTTTATAACTCTACCACTTTGGGGCAAG CTATTCCAGCACTGGTTTTGAATGCTGTATGCAACCAGTCTGAATACCACATACGCTGCACTGTTCTTAGAGGGT GAAAGACCCGGCTAGAGGCACTATGGACTTCAGGATCCACTAGACAGTTTTCAGTTTGGTTTGGAGGTAGCTGGGT AATCAAAAATGTTTAGTCATTGATTCAATGTGAACGATTACGGTCTTTATGACCAAGAGTCTGAAAATCTTTTTG TTATGCTGTTTAGTATTCGTTTGATATTGTTACTTTTCACCTGTTGAGCCCAAATTCAGGATTGGTTCAGTGGCA GCAATGAAGTTGCCATTTAAATTTGTTCATAGCCTACATCACCAAGGTCTCTGTGTCAAACCTGTGGCCACTCTA TATGCACTTTGTTTACTCTTTATACAAATAAATATACTAAAGACTTT

277/6881 FIGURE 257

278/6881 FIGURE 258

MFSSSAKIVKPNGEKPEEFESGISQALLELEMNSELKAQLRELNITAAKEIEVGGGRKAIIILVPVTQLKSFQKI QIRLVSELEKKFSGKHVVFIAQRRILPKPTRKSCTKNKQKRPRSSTVTAVHDAILEDLVFPSEIVGKKIRVKLDG SRLIKVHLDKAQQNNVEHKVETFSGVYKKLMGKDVNCEFPEFQS

279/6881 FIGURE 259

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280/6881 FIGURE 260

GGGGGTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGCGCCCGCTGCAATCCGTGGAGGAACGCGCCGCCG AGCCACCATCATGCCTGGGCACTTACAGGAAGGCTTCGGCTGGTCACCAACCGATTCGACCAGTTATTTGA GCCCGTGGCGCTTAAGAAAGAAGGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACTTCAGGGTGAAGGGAA AATAATTGATAGAAGACCAGAAAGGCGACCACCTCGTGAACGAAGATTCGAAAAAGCCACTTGAAGAAAAGGGTGA AGGGGGCCGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAG TGGAAGTGATAGATCTGGCCTGAAGCACGAGGACAAACGTGGAGGTAGCGGATCTCACAACTGGGGAACTGTCAA AGACGAATTAACTGACTTGGATCAATCAAATGTGACTGAGGAAACACCTGAAGGTGAAGAACATCATCCAGTGGC AGACACTGAAAATAAGGAGAATGAAGTTGAAGAGGTAAAAGAGGGCGCCCAAAAGAGATGACTTTGGATGAGTG GAAGGCTATTCAAAATAAGGACCGGGCAAAAGTAGAATTTAATATCCGAAAACCAAATGAAGGTGCTGATGGGCA GTGGAAGAGGGATTTGTTCTTCATAAATCAAAGAGTGAAGAGGCTCATGCTGAAGATTCGGTTATGGACCATCA TTTCCGGAAGCCAGCAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCCGCCCAGGACGTGG CGGCAGGGGAGGACGACGTGGGCGTGGTGGGCGCCCAAACCGTGGCAGCAGGACCGACAAGTCAAGTGC TTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAGCTCTGGCTTAACTGGATGCCATAAGACAACCCTGGTT ACTGTCATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTTAAAAATGAACTTCTCCCGCTACACAGA AGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGTATTGGTAGCAGGGATGTTTTCATAATTTTCAGAGAT TATGCATTCTTCATGAATACTTTTGTATTGCTGCTTGCAAATATGCATTTCCAAACTTGAAATATAGGTGTGAAC CTGGTTTTAAATATTGGACATACTGGTTTTAATACCTGCTTTGCATATTCACACATGGTCAACTGGGACATGTTA TCAGTACTTGAACAAATTCAAAGCACATTTGGTTTATTAACCCTTGCTCCTTGCATGGCTCATTAGGTTCAAATT ATAACTAATTTACATTTTCAGCTATATTTACTTTTTAAATGCTTGAGTTTCCCATTTTAAAATCTAAACTAGACA TCTTAATTGGTGAAAGTTGTTTAAACTACTTATTGTTGGTAGGCACATCGTGTCAAGTGAAGTAGTTTTATAGGT ATGGGTTTTTTCTCCCCCTTCACCAGGGTGGGTGGAATAAGTTGATTTGGCCAATGTGTAATATTTAAACTGTTC **TGTAAAATAAAAAAAAAAAAAAAA**

281/6881 FIGURE 261

282/6881 FIGURE 262

ACCTTTAAGCGTCACGGGTGGGGCTGCAGCTTCTGGACCTAGGACTTTGAAC<u>ATG</u>TCGCGCCTGAAGCGGATAGC GGGGCAGGATCTCCGCGCTGGTTTCAAAGCAGGTGGAAGAGCTGCGGTACCTCGGTACCCCAAGGGCTGTTGAA GGCAGCGAGGAAGAGCGCCAGTTAAACCTGTCGGGTAGAAACCTCAGTGAAGTGCCGCAGTGTGTCTGGAGAAT TTTGACCAAACTAATATCAAACAATAAACTTCAGTCACTTACAGATGACCTGCGACTCTTGCCTGCACTGAC TAATGTCAGCCATAATAAACTGAAAATACTCCCTGAAGAAATTACAAACCTAAGAAACCTGAAGTGCCTGTATCT CCAGCATAATGAATTAACCTGCATATCAGAGGGATTTGAACAACTTTCCAATTTAGAAGATTTAGATCTTTCAAA CAATCATCTTACAACTGTTCCTGCTAGTTTTTCTTCTCTGTCCAGTCTGGTGCGACTCAATCTTTCTAGTAATGA ACTGAAGAGTTTGCCAGCAGAAATAAATAGAATGAAAAGGTTGAAGCATTTGGATTGTAATTCAAATCTCTTGGA AACTATACCTCCTGAATTGGCTGGCATGGAATCACTAGAATTGCTTTATTTGCGGAGGAATAAATTACGTTTTCT ACCAGAATTTCCTTCTTGTAGTCTATTGAAGGAATTGCACGTAGGTGAAAACCAGATTGAAATGTTAGAGGCAGA ACATCTTAAACATCTGAATTCAATTCTTGTGCTAGACCTGAGGGATAACAAGTTAAAATCTGTTCCAGATGAAAT TATACTACTACGGICCTTGGAAAGGCTTGACCTAAGCAACAATGATATTAGTAGTCTTCCCTATTCATTGGGGAA CCTTCATTTGAAATTTTTGGCATTAGAAGGAAATCCTTTGAGAACAATTCGAAGAGAAATTATAAGTAAAGGAAC ACAAGAAGTCCTAAAATATCTACGAAGCAAGATCAAAGATGATGGACCTAGCCAAAGTGAGTCTGCTACTGAGAC TGCCATGACACTACCAAGTGAATCCAGAGTCAATATACATGCCATCATTACATTAAAAATATTAGACTATAGTGA TAAACAAGCAACTTTGATTCCTGATGAGGTGTTTGATGCAGTAAAAAGCAACATCGTCACTTCTATTAACTTCAG TAAGAATCAACTATGTGAAATTCCAAAAAGGATGGTAGAACTGAAGGAAATGGTTTCTGATGTCGATCTCAGTTT TAATAAACTTTCCTTTATATCCTTGGAGTTATGTGTGCTTCAGAAATTGACTTTTTTAGATCTCAGGAACAATTT TTTAAATTCTTTGCCAGAAGAAATGGAATCACTGGTAAGACTGCAAACGATCAATCTTTCCTTTAATAGGTTTAA **AATGCTACCTGAAGTTCTATATCGTATCTTCACACTTGAAACAATTCTGATTAGTAATAATCAGGTTGGATCTGT** GGACCCTCAGAAAATGAAGATGATGGAAAATCTGACCACGTTGGACCTTCAAAATAATGACCTCTTACAAATTCC CATATTAATGAAAGGAACAGCTGCTATACTTGAATATTTGAGAGACCGAATTCCTACTTAACATGGAGTTGCTTT ATAACCCTTGTCATGTATTATCACCCTGGTTAATTCTAAGGAGGATGTAACATTTGTTTTAGTATCATCTTAAA AGGTGATTATTGTAATTGATCTTGTAGTTTCCCAGTATCACCTACCCGTTGGTATAATTAGCCTGGGCCATATTC ACTGCCAGTAAATATTTTTACATTTTTATTTAAGATTTTTGTAAGGTGTTGTGTACATTTGTAATGGTGATAACC ACAATGTGTTCATACATTTGTTCTAAATGTTTTGCTTATGATTTATCCTGCTAACTTTCATTTTCTTATAGCAAG CAGTTTTTCAAAAATGAATTTTTATTTAATGTGGTTCAGTATTATAATAACAAAGCATTTTTGTAGAACTGGTT TTTTTTCTCATTTATTTTTGTATTCCATACAATGTGACCAATTGACTTGAATATGACTAGCCAGTTTCTATGTTT TTGTTAGATATAAAATTAAATCGAATTTTGTTGAATACTGTTCTTTGGCATTTAAAAAATTAAGACCTTCTTATCT TGGGCCACATGTCAAAAGAAAAAGGAAAACAAAAATATATTAAAAATAAGACTTTTCATTACCCATGATAGGACTT CTTGCAATCTTGGTAAGACTAAACTTGCAGTGTTTTTCTAAAAGGGAATTTGATAGGTAAACTTGATTTAATAAA AATTAAATATCATTTTTGTTTACACCAAAATTATCAGAAGTAGGTTGATTAGTCATTATAACACTTACCATATGA CATGCTTATATTATGAAAAAATTGCTAATAAAGATAAATACTACATGTTCAGAATAAAAGTTACATTTTTC

283/6881 FIGURE 263

MSRLKRIAGQDLRAGFKAGGRDCGTSVPQGLLKAARKSGQLNLSGRNLSEVPQCVWRINVDIPEEANQNLSFGAT
ERWWEQTDLTKLIISNNKLQSLTDDLRLLPALTVLDIHDNQLTSLPSAIRELENLQKLNVSHNKLKILPEEITNL
RNLKCLYLQHNELTCISEGFEQLSNLEDLDLSNNHLTTVPASFSSLSSLVRLNLSSNELKSLPAEINRMKRLKHL
DCNSNLLETIPPELAGMESLELLYLRRNKLRFLPEFPSCSLLKELHVGENQIEMLEAEHLKHLNSILVLDLRDNK
LKSVPDEIILLRSLERLDLSNNDISSLPYSLGNLHLKFLALEGNPLRTIRREIISKGTQEVLKYLRSKIKDDGPS
QSESATETAMTLPSESRVNIHAIITLKILDYSDKQATLIPDEVFDAVKSNIVTSINFSKNQLCEIPKRMVELKEM
VSDVDLSFNKLSFISLELCVLQKLTFLDLRNNFLNSLPEEMESLVRLQTINLSFNRFKMLPEVLYRIFTLETILI
SNNQVGSVDPQKMKMMENLTTLDLQNNDLLQIPPELGNCVNLRTLLLDGNPFRVPRAAILMKGTAAILEYLRDRI
PT

284/6881 FIGURE 264

285/6881 FIGURE 265

GCTCTTTCCCTAAGCAGCCTGAGGTAATCTGTGAAAATGGTTCGCTACTCACTTGACCCGGAGAACCCCACGAAA
TCATGCAAATCAAGAGGTTCCAATCTTCGTGTTCACTTTAAGAACACTCGTGAAACTGCTCAGGCCATCAAGGGT
ATGCATATACAAAAAGCCACGAAGTATCTGAAAGATGTCACTTTACAGAAACAGTGTGTACCATTCCGACGTTAC
AATGGTGGAGTTGGCAGGTGTGCGCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCCAAAAAGAGTGCT
GAATTTTTGCTGCACATGCTTAAAAACACAGAGAGTAATGCTGAACTTAAGGGTTTAGATGTAGATTCTCTGGTC
ATTGAGCATATCCAAGTGAACAAAGCACCTAAGATGCGCCGGCGGACCTACAGAGCTCATGGTCGGATTAACCCA
TACATGAGCTCTCCCTGCCACATTGAGATGATCCTTACGGAAAAAGGAACAGATTGTTCCTAAACCAGAAGAGGAG
GTTGCCCAGAAGAAAAAGATATCCCAGAAGAAAACTTATGGCACGGGAGTAAATTCAGCAT
TAAAATAAATGTAATTAAAAGG

286/6881 FIGURE 266

MVRYSLDPENPTKSCKSRGSNLRVHFKNTRETAQAIKGMYIQKGTKYLKDVTLQKQCIPFRHYNGGVGRCAQAKQ WGWTQGRWPKKSAEFLLHVLKNTESNAELKGRFSGH

287/6881 FIGURE 267

AATACCCAGCTTGGTTTATTTTTCTTAGAATCTGTTGCTAAGACTGGGGACGCTGTTTTCTTTTACAAAGGGAAA ${\tt TCTAAGTTAATTTCAAGGCATTCGAA} \underline{{\tt ATG}} {\tt GGGAAAGACTATTATTGCATTTTGGGAATTGAGAAAGGAGCTTCAG$ ATGAAGATATTAAAAAGGCTTACCGAAAACAAGCCCTCAAATTTCATCCGGACAAGAACAAATCTCCTCAGGCAG AGGAAAAATTTAAAGAGGTCGCAGAAGCTTATGAAGTATTGAGTGATCCTAAAAAGAGAGAAATATATGATCAGT TTGGGGAGGAAGGGTTGAAAGGAGGAGCAGGAGGTACTGATGGACAAGGAGGTACCTTCCGGTACACCTTTCATG GCGATCCTCATGCTACATTTGCTGCATTTTTCGGAGGGTCCAACCCCTTTGAAATTTTCTTTGGAAGACGAATGG GTGGTGGTAGAGATTCTGAAGAAATGGAAATAGATGGTGATCCTTTTAGTGCCTTTGGTTTCAGCATGAATGGAT ATCCAAGAGACAGGAATTCTGTGGGGCCATCCCGCCTCAAACAAGATCCTCCAGTTATTCATGAACTTAGAGTAT CACTTGAAGAGATATATAGTGGTTGTACCAAACGGATGAAGATTTCTCGAAAAAGGCTAAACGCTGATGGAAGGA GTTACAGATCTGAGGACAAAATTCTTACCATTGAGATTAAAAAAGGGTGGAAAGAAGGCACCAAAATTACTTTTC CAAGAGAAGGAGATGAAACACCAAATAGTATTCCAGCAGACATTGTTTTTATCATTAAAGACAAAGATCATCCAA AATTTAAAAGGGATGGATCAAATATAATTTATACTGCTAAAATTAGTTTACGAGAGGCATTGTGTGGCTGCTCAA TTAATGTACCAACACTGGATGGAAGAACATACCTATGTCAGTAAATGATATTGTGAAACCCGGAATGAGGAGAA GAATTATTGGATATGGGCTGCCATTTCCAAAAAATCCTGACCAACGTGGTGACCTTCTAATAGAATTTGAGGTGT TTTGTTACACATATTTTGATAAGGCACTGAAAATATAAAAGGACTGGTAGTTTACTGATGTAGATGTGAATTCTG TATAAAGATGTGTAAATTGTTTTGAGGGTTCATTAAATTGCAT

288/6881 FIGURE 268

MGKDYYCILGIEKGASDEDIKKAYRKQALKFHPDKNKSPQAEEKFKEVAEAYEVLSDPKKREIYDQFGEEGLKGG AGGTDGQGGTFRYTFHGDPHATFAAFFGGSNPFEIFFGRRMGGGRDSEEMEIDGDPFSAFGFSMNGYPRDRNSVG PSRLKQDPPVIHELRVSLEEIYSGCTKRMKISRKRLNADGRSYRSEDKILTIEIKKGWKEGTKITFPREGDETPN SIPADIVFIIKDKDHPKFKRDGSNIIYTAKISLREALCGCSINVPTLDGRNIPMSVNDIVKPGMRRRIIGYGLPF PKNPDQRGDLLIEFEVSFPDTISSSSKEVLRKHLPAS

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289/6881 FIGURE 269

GCGCACGGCCTGTCCGCTGCACACCAGCTTGTTGGCGTCTTCGTCGCCGCGCTCGCCCCGGGCTACTCCTGCGCG $\texttt{CCACAATG} \texttt{AGCTCCCGCATCGCCAGGGGGCGCTCGCCTTAGTCGTCACCCTTCTCCACTTGACCAGGCTGGCGCTCTCTCCACTTGACCAGGCTGGCGCTCTCTCCACTTGACCAGGCTGGCGCTCTCTCCACTTGACCAGGCTGGCGCTCTCTCCACTTGACCAGGCTGGCGCTCTCTCACTCTCCACTTGACCAGGCTGGCGCTCTCTCACTCTCCACTTGACCAGGCTGGCGCTCTCTCACTCTCCACTTGACCAGGCTGGCGCTCTCTCACTCA$ $\verb|CCACCTGCCCGCTGCCACTGCCCCCTGGAGGCGCCCAAGTGCGCCCGGGAGTCGGGCTGGTCCGGGACG|\\$ GCTGCGGCTGCTGTAAGGTCTGCGCCAAGCAGCTCAACGAGGACTGCAGCAAAACGCAGCCCTGCGACCACACCA CCTGTGAATATAACTCCAGAATCTACCAAAACGGGGAAAGTTTCCAGCCCAACTGTAAACATCAGTGCACATGTA TTGATGGCGCCGTGGGCTGCATTCCTCTGTGTCCCCAAGAACTATCTCTCCCCAACTTGGGCTGTCCCAACCCTC GGCTGGTCAAAGTTACCGGGCAGTGCTGCGAGGAGTGGGTCTGTGACGAGGATAGTATCAAGGACCCCATGGAGG ACCAGGACGCCTCCTTGGTAAGGAGCTGGGATTCGATGCCTCCGAGGTGGAGTTGACGAGAAACAATGAATTGA $\tt TTGCAGTTGGAAAAGGCAGCTCACTGAAGCGGATCCCTGTTTTTGGAATGGAGCCTCGCATCCGATACAACCCTT$ TACAAGGCCAGAATGTATTGTTCAAACAACTTCATGGTCCCAGTGCTCAAAGACCTGTGGAACTGGTATCTCCA AGCCAGTGTACAGCAGCCTGAAAAAGGGCAAGAAATGCAGCAAGAACCAAGAAATCCCCCGAACCAGTCAGGTTTA CTTACGCTGGATGTTTGAGTGTGAAGAAATACCGGCCCAAGTACTGCGGTTCCTGCGTGGACGGCCGATGCTGCA CGCCCCAGCTGACCAGGACTGTGAAGATGCGGTTCCGCTGCGAAGATGGGGAGACATTTTCCAAGAACGTCATGA TGATCCAGTCCTGCAAATGCAACTACAACTGCCCGCATGCCAATGAAGCAGCGTTTCCCTTCTACAGGCTGTTCA CTCATTCTTGAGGAGCATTAAGGTATTTCGAAACTGCCAAGGGTGCTGGTGCGGATGGACACTAATGCAGCCACG ATTGGAGAATACTTTGCTTCATAGTATTGGAGCACATGTTACTGCTTCATTTTGGAGCTTGTGGAGTTGATGACT TTCTGTTTTCTGTTTGTAAATTATTTGCTAAGCATATTTTCTCTAGGCTTTTTTCCTTTTGGGGTTCTACAGTCG TAAAAGAGTAATAAGATTAGTTGGACAGTTTAAAGCTTTTATTCGTCCTTTGACAAAAGTAAATGGGAGGGCAT TCCATCCTTCCTGAAGGGGGACACTCCATGAGTGTCTGTGAGAGGCAGCTATCTGCACTCTAAACTGCAAACAG AAATATTTACCT

290/6881 FIGURE 270

MSSRIARALALVVTLLHLTRLALSTCPAACHCPLEAPKCAPGVGLVRDGCGCCKVCAKQLNEDCSKTQPCDHTKG
LECNFGASSTALKGICRAQSEGRPCEYNSRIYQNGESFQPNCKHQCTCIDGAVGCIPLCPQELSLPNLGCPNPRL
VKVTGQCCEEWVCDEDSIKDPMEDQDGLLGKELGFDASEVELTRNNELIAVGKGSSLKRIPVFGMEPRIRYNPLQ
GQKCIVQTTSWSQCSKTCGTGISTRVTNDNPECRLVKETRICEVRPCGQPVYSSLKKGKKCSKTKKSPEPVRFTY
AGCLSVKKYRPKYCGSCVDGRCCTPQLTRTVKMRFRCEDGETFSKNVMMIQSCKCNYNCPHANEAAFPFYRLFND
IHKFRD

291/6881 FIGURE 271

CCCCGACGCCTGCGTGCCCTGCCGGCCTCCGCACCGTCCGCCGCTCCCGGGGCTGTTGTGTCTCCGA GGGGGAATATACAAAGTGAAGCCACATTGCCAAACTTGCAGCAGCGATTGCAGCAGTTGCTGCCGCTGCGCCGCG CCTGAAGCCGCGCGCGGGCCGAGGGCTCCTGCAGCTCCTCGCGCGCAGTCGGAGGCGGAGAAGGACGAAGAC TGAGACTGACACTTCTGCTCCCGGCCGCCCGGCACTTACGCGGGGGCCCCCCAACCCGCCCCAGAGCAACGCGAT CAATATTGCAATATAGGGGAAAAGCAGACCATGTGAATCCGGGCAGCAGCTCGCAGCCGCCCCCGGTGACGGCC GGCTCCCTCTCCTGGAAGCGGTGCGCAGGCTGCGGGGGCAAGATTGCGGACCGCTTTCTGCTCTATGCCATGGAC AGCTATTGGCACAGCCGGTGCCTCAAGTGCTCCTGCCAGGCGCAGCTGGGCGACATCGGCACGTCCTGTTAC ACCAAAAGTGGCATGATCCTTTGCAGAAATGACTACATTAGGTTATTTGGAAATAGCGGTGCTTGCAGCGCTTGC GGACAGTCGATTCCTGCGAGTGAACTCGTCATGAGGGCCGCAAGGCAATGTGTATCATCTTAAGTGTTTTACATGC TCTACCTGCCGGAATCGCCTGGTCCCGGGAGATCGGTTTCACTACATCAATGGCAGTTTATTTTTGTGAACATGAT AGACCTACAGCTCTCATCAATGGCCATTTGAATTCACTTCAGAGCAATCCACTACTGCCAGACCAGAAGGTCTGC TAAAAGGTCAGAGTAATGCAGAATGCGTGCCTTCATCTCAGATTTGTTCATCACAGGTGGATCCCATGTGTCTTC AGTAGACAAGTCACCTTTGTAGCTAGCACCAGTGCCAGCTCCATGCCATTGCACCTTCTTTAGTCTTGATTGCCC TTCCCGCATTTATTGGTGTATTAAAATGACTGAATATGAACATTAAGGACTCCATGAACCTGGGCTAATGGGAGA CTAATGAAGCTAATTAAAAGAAGCATTCAAATCTGCTTTCTACCCTCATTAACAATTAGCAGGGCACTGGCCAGA GTTTGTACCCTGTGTTTTACCTTAACAACATTCTATTTGCTCTTTGTATATTTAAGTGTTGTAAGGAAACGTGTT TCAATCAAAACTGACCATGAGATAAAGGAAAGAGATGTGGCTTTTGTGATATTCTATCACAAACACTTATTGTAT CTCTGTAAAATACAATGTATGTATGCATGTAAGTGTTTTTTGTCCTAATGTTGCTACTCCCATGGCAAAGAAAAA AAAAGAATGAAAAAAAAAATTTGGAAAAAAAATCAGGCTCATAGCAGCTACTGTAGAAAAATTCCCC CTACTTCTAATTTGCTGAATGAAGAAAAAAAAAAATCTTTTATTTGTGATATTTTCAGAGACATTTGCTCTAGTA ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

292/6881 FIGURE 272

MVNPGSSSQPPPVTAGSLSWKRCAGCGGKIADRFLLYAMDSYWHSRCLKCSCCQAQLGDIGTSCYTKSGMILCRN DYIRLFGNSGACSACGQSIPASELVMRAQGNVYHLKCFTCSTCRNRLVPGDRFHYINGSLFCEHDRPTALINGHL NSLQSNPLLPDQKVC

293/6881 FIGURE 273

AGCGATGGCGGCTGGGCCGAGTGGGTGTCTGGTGCCGGCGTTTTGGGCTACGGTTGTTGTTGGCGACTGTGCTTCA AGCGGTGTCTGCTTTTGGGGCAGAGTTTTCATCGGAGGCATGCAGAGAGTTAGGCTTTTCTAGCAACTTGCTTTG CAGCTCTTGTGATCTTCTCGGACAGTTCAACCTGCTTCAGCTGGATCCTGATTGCAGAGGATGCTGTCAGGAGGA AGCACAATTTGAAACCAAAAAGCTGTATGCAGGAGCTATTCTTGAAGTTTGTGGATGAAAATTGGGAAGGTTCCC TCAAGTCCAAGCTTTTGTTAGGAGTGATAAACCCAAACTGTTCAGAGGACTGCAAATCAAGTATGTCCGTGGTTC AGACCCTGTATTAAAGCTTTTGGACGACAATGGGAACATTGCTGAAGAACTGAGCATTCTCAAATGGAACACAGA $\texttt{CAGTGTAGAAGAATTCCTGAGTGAAAAGTTGGAACGCATA} \underline{\textbf{TAAA}} \\ \texttt{TCTTGCTTAAATTTTGTCCTATCCTTTTGTT}$ ACCTTATCAAATGAAATATTACAGCACCTAGAAAATAATTTAGTTTTGCTTCCATTGATCAGTCTTTTACT TGAGGCATTAAATATCTAATTAAATCGTGAAATGGCAGTATAGTCCATGATATCTAAGGAGTTGGCAAGCTTAAC AAAACCCATTTTTTATAAATGTCCATCCTCCTGCATTTGTTGATACCACTAACAAAATGCTTTGTAACAGACTTG $\tt CGGTTAATTATGCAAATGATAGTTTGTGATAATTGGTCCAGTTTTACGAACAACAGATTTCTAAATTAGAGAGGT$ TAACAAGACAGATGATTACTATGCCTCATGTGCTGTGTGCTCTTTGAAAGGAATGACAGCAGACTACAAAGCAAA TAATACAAATGTTATTTATAGTTTACAATGAATGCACTGCATAAAAACTTTGTAGCTTCATTATTGTAAAACATA TTCAAGATCCTACAGTAAGAGTGAAACATTCACAAAGATTTGCGTTAATGAAGACTACACAGAAAACCTTTCTAG GGATTTGTGTGGATCAGATACATACTTGGCAAATTTTTGAGTTTTACATTCTTACAGAAAAGTCCATTTAAAAAGT TTTCATGTTTAAAAATGATGTTTTTCAATGCATTTTTTCATGTAAGCCCTTTTTTTAGCCAAAATGTAAAAATG GCTGTAATATTTAAAACTTATAACATCTTATTGTTGGTAATAGTGCTTTATATTTGTCTGATTTTATTTTTCAAA GTTTTTCATTATGAACACATTTTCATTGGTATATTATTTAAGGAATATCTCTTGATATAGAATTTTTATATTA AAAATGATTTTTTTTTTGGC

294/6881 FIGURE 274

 ${\tt MAAGPSGCLVPAFGLRLLLATVLQAVSAFGAEFSSEACRELGFSSNLLCSSCDLLGQFNLLQLDPDCRGCCQEEAQFETKKLYAGAILEVCGENWEGSLKSKLLLGVINPNCSEDCKSSMSVVQTLYLKLLDDNGNIAEELSILKWNTDSVEEFLSEKLERI$

295/6881 FIGURE 275

296/6881 FIGURE 276

GCTCTTTCCCTAAGCAGCCTGAAGTAATCTGTGAAAAATGGTTCGCTATTCACTTGACCCGGAGAACCCCATGAAA
TCATGCAAATCAAGAGGTTCCAATCTTCGTGTTCACTTTAAGGACACTCGTGAAACTGCTCAGGCCATCAAGGGT
ATGCATATACGAAAAGCCACGAAGTATCTTAAAGATGTCACTTTACAGAAACAGTGCATACCATTCCGACGTTAC
AATGGTGGAGTTGGCAAGTGTGCGCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCCAAAAAGAGTGCT
GAATTTTTGCTGCACATGTTTAAAAACGCAGAGGGTAATACTGAACTTAAGGGTTTAGATGTAGATTCTCTGGTC
ATTGAGTATATCCAAGTGAACAAAGCACCTAAGATGCTCCGCCGGACCTACAGAGCTCATGGTCGGATTAACTCA
TACATGAGCTCTCCCTGGCACATTGAGATGATCCTTACTGAAAAGGAACAGATTGTTCCTAAACCAGAAAAGGAC
GTTGCCCAGAAGAAAAAGATATCCCAGAAGAAAACTGAAGAAAAACTTATGGCCCGGAAGTAAATTCAGCAT
TAAAATAAATGTAATTAAAAGG

297/6881 FIGURE 277

CTTTTCACAACGGGTTTGCTGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAAGAA AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTTCTGGCCATCTGATCTAC AAATGCGGTGGCATCGACAAAAGAACAATTGAAAAAATTGCAGAAAGAGGCTGCTGAGATGGGAAAGGGCTCCTTC AAGTATGCCTGAGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA TTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTCATCAAAAACATGATTACA GGGACATCTCAGGCTGGTTGTGCTGTCCTAATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCCAAG AATGGGCAGACCCGAGAGCATGCCCTTCTGGCATATACACTGGGTGTGAAACAACTAATTGTTGATGTTAACAAA ATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAAATCAGCACTTACATTAAG AAAATTGGCTACAACCCCAACACAGTAGCATTTGTGCCAATTTCTGGTTAGAATGGTGACAACATGCTGGAGCCA AGTGCTAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCATAAGGATGGCAATGCCAGTGGAACCATGCTGCTT AAAATTGGTGGTATTGGTACTGTTCTTGTTGGCCGAGTGGAGACTGGTATTCTCAAACCTGGTATGGTGGTCACC GGGGACAATATGGGCTTCAATGTCAAGAATGTGTCTGTCAAGGATGTTCATCGTGGCAACGTTGCTGGTGACAGC AAAAATGACCCACCAATGGAAGCAGCTGGCAAGCCCATGTGTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGT TGGTTAATGATAATACCATCAAAAACCTTCAGAAGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTT TTTCGCATGCAGCAGTTTTAAGTTATTAGTTTTTAAAATCAGTACTTTTTAAATGGAAACAACTTGACCAAAAAT TTGTCACAGAATTTTGAGACCCATTAAAAAAGTTTAATGAG

298/6881 FIGURE 278

MLEPSANMPWFKGWKVTHKDGNASGTMLLEALDCILPPTRPTDKPLRLPLQDVYKIGGIGTVLVGRVETGILKPG
MVVTFAPVSVTTEVKSVEMHHEALNEALPGDNMGFNVKNVSVKDVHRGNVAGDSKNDPPMEAAGKPMCVÉSFSDY
PPLGRFTVHDMRQTLAVGVIKAVDKKAAGAGKVTKSAQKAQKAK

299/6881 FIGURE 279

300/6881 FIGURE 280

GCCAAAATGGGAAAAGAAAAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACT
TCTGGCCATCTGATCTACAAATGCGGTGGCATCGACAAAAGAACAATTGAAAAATTGCAGAAAAGAGGCTGCTGAG
ATGGGAAAGGGCTCCTTCAAGTATGCCTGAGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGGTTGTGCTGTCCTAATTGTTGCTGCTGGTGTTGGTGAAATTT
GAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCATATACACTGGGTGTGAAACAACTA
ATTGTTGATGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTGTTAAGGAA
ATCAGCACTTACATTAAGAAAATTGGCTACAACCCCAACACAGTAGCATTTTGTGCCAAATTCTTGAAGTCTGGTG
ATGCTGCCATTGCTGATATGGTTCCTGGCAAGCCCATGTGTTTGAGAGCTTCCCAGACTATCCACCTTTGGGTC
GCTTTACTGTTCATGATATGAGACAGACACTTGCGGTGGTG

301/6881 FIGURE 281

302/6881 FIGURE 282

GTTACTCAAAGACTACCTACTGCGTGGTGCTCCAAGTGAAATTCGTGAAGAATTAGAAAAGCAGCTTTATTCTTG TATTGCTCTCAAAGTCACAGCAAATCAAATGGAAATGGAACATTCTTTGATACTAAATAACCTAAAAAACATTATT GTGGAAGAAATTTCCTACACTAATGACTCTTAGTTCATTTGGACATAATTACCATTTTAAGAAACCTGCCACTT TTAAAGAACAATTTTGAGCATTAAAAAAAAATGGCTTCAAATTCCGGCCAGTTACACAAAACTCCTTCCCCCCAG GCCTGAGAAGCCATCAGTATGTGATCACTGAAGTAATGGCAGGTGTAGGATCAACAGGTCCCCAAGATGTCATTC CTGGAAGCATTGTGTTTGCATTGAAGCTGCTGTTCAACAAGAAAATTTATAAATTTACTAATGTCTTAGCATGGT AAAGTTTGCACATTAACAGAAATTAAGACTGCAAAGCAGGTTAAACTTGCTTCTTTATAAAACAGATGTTGGGTT AATAGCATGGTTTACTGTATTAAAGACTTATACACCCATTTTTAACCTCATTCAGACATCAAGTTATGTGTAGCT TCACAATGGTTCAAGTGGCTTACTTCAAGAAATCTTATACTTGACAGTACACCAATTTTATTGACTAAAAATGGA AGGCCCAATCAAGATCCACATATCCTGATTTTGAACTATGTGAAAGTGGGACTGTAAGTGCAAGACTAAAATAAA TTATAGCAGACTTTTTAGTAATAACTTTCCATTTTCAAACAGTATATCCTGTGGGCCAAAGGGCTATTTCTTAAA GAGGCATGTAAATGTATTTATTTATCTAATGTTTTTTTCCCCATGTAAACTTGATATACAAGGTTTAGTATTTGC TCCTCTTTCATATTTTTCACACGTATACTCAGATTTGGCATGTACCTTTCAACATCTCCATAAAATTAAACAC TGACCATCACTGGACAGCTTTCTCTCAAAACTTTCCTTCAACGCCATGGATTAGCACCAGTTTTGTTTACTTTAA CTTGCCAAATTTTTAGGGAGAGCTGTTCATCATACAACATAAGGGATAATGACTCCTGTCAGGTAAAACAGAAGC TTGCTTTTCCAAAATATTTCAGGGTATTTCCTATAAGGTTCATAAGAATAAGAGCTTAACACAGAAATAGTTGCT GTTCATAAGTTTATTATCTATATCTGAAAAAATCATAGAAAATTGCTGGGTTTAGCTCTCAGCAGCCCGCTCCTG AGCTCTGAGGAAGCTTGCCTTCTTTTGAGCTACCCGATCCTTCTTCTGAGCAAGGGACATTTTGGGACGGTTCCA CCTACAAAAGATAGGAATATATTTTTTTAAACTATAACTGAAGAGAATAGAATATTTAATTTAAAATTTTAATA AAATTTAATTTTGATAGAGAATATTTAAGACTTTGCAATCAGAAGGTTAAATAATCCAAGTTCAAATACATTTAC TTATGTATGATCTTAAGCTAACTTTCCCAAACCCCAACTTCTGTGATGTCCTACTACCATAGGGCCAAAAGTCAA ATAGAAGACATGTTAGATTCAGTAATACCACTTCTAGGTATTTGCCCAAATGTTTTGAAATCAGTTTGTCCAAGA GAGTGGCACTCCCATGTTCATTGCAGCACTATATATTAATAGCAACAGATAAATGGATAAAGGAAATGTGGTATA GAATATTGTGCTCAGTGAAATAAGCCAGGCACAAAAAGACAAATACTTCATATTCATATAGAATCTAAAACAATG GTATAAAATCTCCAACAGGAGGAGTATGATTTTGTTTTTAGTTCTATTGCACAGCATGATGAATATAGAATATCG TACATTTCACAATTAAGAGAATAAATTTCAAATGTTGTTGCCACAAAGTGTTAAGTATTTGAGGTGAATATGTTA AATACATTGATTTAATTACTATACATTGTATTTGTGGGCCATCACATCACTTTATGCTTACATGTTCATTAAGTA TTACTTTCTATTCCATTTAAAGATCAAAACATGAAAGATCAACAAAAAGCAACTTGTCAGCCAATAAAAAAATGC AGTAACCAGTACTTAGACTGTACTAGGATAGAAAGAACCACCTCAGTAGTGTCTGAGGCTAACACATTTCCATCA CCACAGTTACTTTTGCAAACCTGGTTCCCTTCGCTTCTGCCACATCACGCAGAGCTAGTGATCGAGTTTGCACAA ACCTCTTCTTTTAACTTCTTTCTTGGGCTTCTTTTCATAGACTGGATTCTCTCGTATAGCAGCATGAGCTTTCT TATACATCTCCTCCATCTGAAACAAAGGAAAGCAAACAGTACTTGGTTTCATTTCATGTGCCCTACTATATTAAT GCAACCATAACTTATCTTGTCCTTCTAAGCCAGATTCTCAAAAGGAACTAAACTAAATCAATGTTGGTAAACACT TTAACTTCTAAATGTAACTCACCTTTTCCTAACAAATTCCCAATTTTCACCTTATGCAATGTGAATTATCACTAC AGAACTCCATCTTACTCAAGAAAAAAATCAGGCCAGGTGTGGTGGTTCATGCCTGTAATCTCAAGCACTTTGGGA GTCTGAAGTGGGAGGATCACTTCAGCCCAGGAGTTTGAGACCAGCTAAGGCAACACAGTGAGACCTGTCTCCATA AAAAACTAATTAGCCAGGTGGCAATTATTAATGGTGGCATGCACCTGTAGTCCCAGCTACAGGACTACACGTGA GTCCAGGAGGTCAAGGCTGCAGTGGCACAATCACAGCTCACTGGACCCCAGCCTAGATGACAGAATGAGACCTCA TCTCTACCAAAAATTAAAAAAAAAAAAAAAAAAAATTAGCAGGG

303/6881 FIGURE 283

 ${\tt MFFSPCKLDIQGLVFAPLSYYFHTYTQIWHVPFNISIKLNTFWRKEPLFSAQRFRLPKVEHVKNLCDHHWTAFSQ} \\ {\tt NFPSTPWISTSFVYFKVLFPFIIWL}$

304/6881 FIGURE 284

305/6881 FIGURE 285

MGFVKVVKNKAYFKRYQVKFRRREGKTDYYARKRLVIQDKNKYNTPKYRMIVRVTNRDIICQIAYARIEGDMIV CAAYAHELPKYGVKVGLTNYAAAYCTGLLLARRLLNRFGMDKIYEGQVEVTGDEYNVESIDGQPGAFTCYLDAGL ARTTTGNKVFGALKGAVDGGLSIPHSTKRFPGYDSESKEFNAEVHRKHIMGQNVADYMRYLMEEDEDAYKKQFSQ YIKNSVTPDMMEEMYKKAHAAIRENPVYEKKPKKEVKKKRWNRPKMSLAQKKDRVAQKKASFLRAQERAAES

306/6881 FIGURE 286

307/6881 FIGURE 287

MVNVKTNLGRNIYQFQYLSPPQYCMLLEEDEDAYKKQFSQYIKNSVTPDMMEEMYKKAHAAVPENPVYEKKPKKE VKKKRWNRSKMSLAQKKDWVAQKKASFLRA

308/6881 FIGURE 288

GCTGACTCCAGTGTCCCGAGAGGCGCCGCTTCTTCCGCTTTCTCGTCAGGCTCCTGCAACCCCAGGCATGAACCA AGGTTTCTGAACTACTGGGCGGGAGCCAACGTCTCTTCTTCTCCCGCTCTGGCGGAGGCTTTGTCGCTGCGGGC $\tt TGGGCCCCAGGGTGTCCCCC\underline{ATG}GCGGGGCCGCGGGTGGAGGTCGATGGCAGCATCATGGAAGGGGGCGGCCAGA$ GGGCAGAAATTGGCTCAACAGAAATAACCTTTACACCAGAGAAGATCAAAGGTGGAATCCACAGCAGATACCA AGACAGCAGGGAGTGTGCCTCTTGATGCAGGTCTCAATGCCGTGTTCTCTTTTGCTGCTTCTCCATCAGAAC TTCATTTGAAAGGTGGAACTAATGCTGAAATGGCACCACAGATCGATTATACAGTGATGGTCTTCAAGCCAATTG TTGAAAAATTTGGTTTCATATTTAATTGTGACATTAAAACAAGGGGATATTACCCAAAAGGGGGTGATGAAGTGA TTGTTCGAATGTCACCAGTTAAACAATTGAACCCTATAAATTTAACTGAGCGTGGCTGTGTGACTAAGATATATG GAAGAGCTTTCGTTGCTGGTGTTTTGCCATTTAAAGTAGCAAAAGATATGGCAGCGGCAGCAGTTAGATGCATCA GAAAGGAGATCCGGGATTTGTATGTTAACATCCAGCCTGTTCAAGAACCTAAAGACCAAGCATTTGGCAATGGAA ATGCAGACAAAGTTGGAATTGAAGCTGCCGAAATGCTATTAGCAAATCTTAGACATGGTGGTACTGTGGATGAGT ATCTGCAAGACCAGCTGATTGTTTTCATGGCATTAGCCAATGGAGTTTCCAGAATAAAAACAGGACCAGTTACAC TCCATACGCAAACCGCGATACATTTTGCTGAACAAATAGCAAAGGCTAAATTTATTGTGAAGAAATCAGAAGATG AAGAAGACGCCGCTAAAGATACTTATATTGAATGCCAAGGAATTGGGATGACAAATCCAAATCTA**TAG**AGTA TTTGCCTCTTAAATGATACCTCATTGATATATTGCACTATTTCATAAAATACTATAAAATAATGACTAGGAAGTAA CTTATTAAAGGCTATGACTTAAATTTGAAGATGAAGTACAGTGTTCTAGGTTTGCTGAGAAGGCTTCATTAAATT AATCTCACTTTGAATATCTCCTGAGAGATGGACAATGAAATATCAGTTGGTGGATATGTGTGATAGCTGATTTCA ATATTGAAGTATTGAAATAAAATATTCTTTACACCTGAG

309/6881 FIGURE 289

MAGPRVEVDGSIMEGGGQILRVSTALSCLLGLPLRVQKIRAGRSTPGLRPQHLSGLEMIRDLCDGQLEGAEIGST EITFTPEKIKGGIHTADTKTAGSVCLLMQVSMPCVLFAASPSELHLKGGTNAEMAPQIDYTVMVFKPIVEKFGFI FNCDIKTRGYYPKGGGEVIVRMSPVKQLNPINLTERGCVTKIYGRAFVAGVLPFKVAKDMAAAAVRCIRKEIRDL YVNIQPVQEPKDQAFGNGNGIIIIAETSTGCLFAGSSLGKRGVNADKVGIEAAEMLLANLRHGGTVDEYLQDQLI VFMALANGVSRIKTGPVTLHTQTAIHFAEQIAKAKFIVKKSEDEEDAAKDTYIIECQGIGMTNPNL

310/6881 FIGURE 290

311/6881 FIGURE 291

 ${\tt MSGALDVLQMKEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAGRAIVAIENPADVSV} \\ {\tt ISSRNTGQRAVLKFAAATGATPIAGRFTPGTFTNRIQAAFREPRLVVVTDPRADHQPLTEASYVNLPTIALCNTD} \\ {\tt SPLCYVDIAIPCNNKGTHSVGLMWWMLAREVLRMCGTISREHPWEVMPDLYFDRDPEEIEKEEQAAAEKAVTKEE} \\ {\tt FQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATEDWSAAPTAQATEWVGATTDWS} \\ {\tt .} \\$

312/6881 FIGURE 292

GGCACGAGGAGAATCAGGAGCTTAGGATGTATTAACACCAACTCATTAATATACTAACCGGACAATGTTCTACA AACAATTCTACATTGTAAAGGACTGGATTGGCACAAAATAAAATAATTTTATTTTATTCAGCTTATAATATGACT CGATGGAGGAAAATTTGATAAGCATGAGAGAAGACCATTCTTTCATGTTCGTTACAGAATGGAAGCTTCTTGCC TAGAGCTGGCCTTGGAAGGGGAACGTCTATGTAAATCAGGAGACTGCCGCGCTGGCGTGTCATTCTTTGAAGCTG CAGTTCAAGTTGGAACTGAAGACCTAAAAACACTTAGCGCTATTTACAGCCAGTTGGGCAATGCTTATTTCTATT TGCATGATTATGCCAAAGCATTAGAATATCACCATCATGATTTAACCCTTGCAAGGACTATTGGAGACCAGCTGG GGGAAGCGAAAGCTAGTGGTAATCTGGGAAACACCTTAAAAGTTCTTGGGAATTTTGACGAAGCCATAGTTTGTT GTCAGCGACACCTAGATATTTCCAGAGAGCTTAATGACAAGGTGGGAGAAGCAAGAGCACTTTACAATCTTGGGA ATGTGTATCATGCCAAAGGGAAAAGTTTTGGTTGCCCTGGTCCCCAGGATGTAGGAGAATTTCCAGAAGAAGTGA GAGATGCTCTGCAGGCAGCCGTGGATTTTTATGAGGAAAACCTATCATTAGTGACTGCTTTGGGTGACCGAGCGG $\tt CACAAGGACGTGCCTTTGGAAATCTTGGAAACACACATTACCTCCTTGGCAACTTCAGGGATGCAGTTATAGCTC$ ATGAGCAGCGTCTCCTTATTGCAAAAGAATTTGGAGATAAAGCAGCTGAAAGAAGAGCATATAGCAACCTTGGAA ${\tt ATGCATATATTTCTTGGTGAATTTGAAACTGCCTCGGAATACTACAAGAAGACACTACTGTTGGCCCGACAGC}$ TTAAAGACCGAGCTGTAGAAGCACAGTCTTGTTACAGTCTTGGAAATACATATACTTTACTTCAAGACTATGAAA GTTGGAGCTTAGGAAATGCATACACAGCACTAGGAAATCATGATCAAGCAATGCATTTTGCTGAAAAGCACTTGG AAATTTCAAGAGGGTTGGGGATAAAAGTGGTGAACTAACAGCACGACTTAATCTCTCAGACCTTCAAATGGTTC TTGGTCTGAGCTACAGCACAAATAACTCCATAATGTCTGAAAATACTGAAATTGATAGCAGTTTGAATGGTGTAC ${\tt TCCCCAAGTTGGGACGCCGGCATAGTATGGAAAATATGGAACTTATGAAGTTAACACCAGAAAAGGTACAGAACT}$ GGAACAGTGAAATTCTTGCTAAGCAAAAACCTCTTATTGCCAAACCTTCTGCAAAGCTACTCTTTGTCAACAGAC TGAAGGGGAAAAATACAAAACGAATTCCTCCACTAAAGTTCTCCAAGATGCCAGTAATTCTATTGACCACCGAA TTCCAAATTCTCAGAGGAAAATCAGTGCAGATACTATTGGAGATGAAGGGTTCTTTGACTTATTAAGCCGATTTC AAAGCAATAGGATGATGATCAGAGATGTTGCTTACAAGAAAAGAACTGCCATACAGCTTCAACAACAACTTCTT CCACTCCCCCTAAAATGATGCTAAAAACATCATCTGTTCCTGTGGTATCCCCCAACACGGATGAGTTTTTAGATC TTCTTGCCAGCTCACAGAGTCGCCGTCTGGATGACCAGAGGGCTAGTTTCAGTAATTTGCCAGGGCTTCGTCTAA CACAAAACAGCCAGTCGGTACTTAGCCACCTGATGACTAATGACAACAAAGAGGCTGATGAAGATTTCTTTGACA TCCTTGTAAAATGTCAAGGATCCAGATTAGATGATCAAAGATGTGCTCCACCACCTGCTACCACAAAGGGTCCGA CAGTACCAGATGAAGACTTTTTCAGCCTTATTTTACGGTCCCAGGGAAAGAGAATGGATGAACAGAGAGTTCTTT TACAAAGAGATCAAAACAGAGACACTGACTTTGGGCTAAAGGACTTTTTGCAAAATAATGCTTTGTTGGAGTTTA AAAATTCAGGGAAAAATCGGCAGACCAT**TAG**TTACTATGGATTTATTTTTTTTCCTTTCAAACACGGTAAGGAA ACAATCTATTACTTTTTCCTTAAAAGGAGAATTTATAGCACTGTAATACAGCTTAAAATATTTTTAGAATGATG TAAATAGTTAA

313/6881 FIGURE 293

MREDHSFHVRYRMEASCLELALEGERLCKSGDCRAGVSFFEAAVQVGTEDLKTLSAIYSQLGNAYFYLHDYAKAL EYHHHDLTLARTIGDQLGEAKASGNLGNTLKVLGNFDEAIVCCQRHLDISRELNDKVGEARALYNLGNVYHAKGK SFGCPGPQDVGEFPEEVRDALQAAVDFYEENLSLVTALGDRAAQGRAFGNLGNTHYLLGNFRDAVIAHEQRLLIA KEFGDKAAERRAYSNLGNAYIFLGEFETASEYYKKTLLLARQLKDRAVEAQSCYSLGNTYTLLQDYEKAIDYHLK HLAIAQELNDRIGEGRACWSLGNAYTALGNHDQAMHFAEKHLEISREVGDKSGELTARLNLSDLQMVLGLSYSTN NSIMSENTEIDSSLNGVLPKLGRRHSMENMELMKLTPEKVQNWNSEILAKQKPLIAKPSAKLLFVNRLKGKKYKT NSSTKVLQDASNSIDHRIPNSQRKISADTIGDEGFFDLLSRFQSNRMDDQRCCLQEKNCHTASTTTSSTPPKMML KTSSVPVVSPNTDEFLDLLASSQSRRLDDQRASFSNLPGLRLTQNSQSVLSHLMTNDNKEADEDFFDILVKCQGS RLDDQRCAPPPATTKGPTVPDEDFFSLILRSQGKRMDEQRVLLQRDQNRDTDFGLKDFLQNNALLEFKNSGKKSA DH

314/6881 FIGURE 294

AAGCAGCCTGAGGTAATCTGTGAAAATGGTTCGCTATTCACTTGACCCGGAGAACCCCACGAAATCATGCAAATC
AAGAGGTTCCAATCTTCGTGTTCACTTTAAGAACACTCGTGAAACTGCTCAGGCCATCAAGGGTATGCATATACG
AAAAGCCACGAAGTATCTGAAAGATGTCACTTTACAGAAACAGTGTGTACCATTCCGACGTTACAATGGTGGAGT
TGGCAGGTGTGCGCAGGCCCTGCACATGCTTAAAAACACAGAGAGTAATGCTGAACTTAAGGGTTTAGATGTAGA
TTCTCTGGTCATTGAGCATATCCAAGTGAACAAAGCACCTAAGATGCCCCCCGGACCTACAGAGCTCATGGTCG
GATTAACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCTTACGGAAAAAGGAACAGATTGTTCCTAAACC
AGAAGAGGAGGTTGCCCAGAAGAAAAGGATATCCCAGAAGAAACTGAAGAAAAACTTATGGCACGGGAGTA
AATTCAGCAT

315/6881 FIGURE 295

GCAGGCTCTGCCTGTGGCCACTAGCAGAGAAGCTGCTGTCCTTCCACCACCAGCACCGGACCACCTGCTCCAAGA CCAGCCTCCTGGGGGGACCAGGCACCCGGCCTTCACTGGCACCCAGGGAGCCGTCCTCAGCAGCGTCAACATGTC AAGGCCCAGCAGCAGCCATTTACTTGCACCGGAAGGAGTACTCCCAGAACCTCACCTCAGAGCCCACCCTCCT GCAGCACAGGGTGGAGCACTTGATGACATGCAAGCAGGGGAGTCAGAGAGTCCAGGGGCCCGAGGATGCCTTGCA GCAGCTGCTGGACATTGAGACCAAGGAGGAGCTGGACTCTTACCGCCTAGACAGCATCCAGGCCATGAATGTGGC GCTCAACACATGTTCCTACAACTCCATCCTGTCCATCACCGTGCAGGAGCCGGGCCTGCCAGGCACTAGCACTCT GCTCTTCCAGTGCCAGGAAGTGGGGGCAGAGCGACTGAAGACCAGCCTGCAGAAGGCTCTGGAGGAAGAGCTGGA GCAAAGACCTCGACTTGGAGGCCTTCAGCCAGGCCAGGACAGATGGAGGGGGGCCTGCTATGGAAAGGCCGCTCCC TATGGAGCAGGCACGCTATCTGGAGCCGGGGATCCCTCCAGAACAGCCCCACCAGAGGACCCTAGAGCACAGCCT CCCACCATCCCCAAGGCCCCTGCCACGCCACACCAGTGCCCGAGAACCAAGTGCCTTTACTCTGCCTCCCAAG GCGGTCCTCTCCCCCGAGGACCCAGAGAGGGACGAGGAAGTGCTGAACCATGTCCTAAGGGACATTGAGCTGTT AGGTCTCACCCAGGCACAGTACATTGACTGCTTCCAGAAGATCAAGCACAGCTTCAACCTCCTGGGAAGGCTGGC CACCTGGCTGAAGGAGACAAGTGCCCCTGAGCTCGTACACATCCTCTTCAAGTCCCTGAACTTCATCCTGGCCAG GTGCCCTGAGGCTGGCCTAGCAGCCCAAGTGATCTCACCCCTCACCCCTAAAGCTATCAACCTGCTACAGTC CTGTCTAAGCCCACCTGAGAGTAACCTTTGGATGGGGTTGGGCCCAGCCTGGACCACTAGCCGGGCCGACTGGAC AGGCGATGAGCCCCTGCCCTACCAACCCACATTCTCAGATGACTGGCAACTTCCAGAGCCCTCCAGCCAAGCACC CTTAGGATACCAGGACCCTGTTTCCCTTCGGCGGGGAAGTCATAGGTTAGGGAGCACCTCACACTTTCCTCAGGA ${\tt CATCCTGGAGCCCCTACAGCCGGGGACCCCTGGGACCCAGGGCCAGTCACCCTCTCGGGTTCCAATGCTTCGACT}$ GTCCCTGACGGGGAGCCAGCTACTTCGCATAAGACCTGGGGAGCTACAGATGCTATGTCCACAGGAGGCCCCACG AATCCTGTCCCGGCTGGAGGCTGTCAGAAGGATGCTGGGGGATAAGCCCTTAGGCACCAGCTTAGACACCTCCAAG AACCAGGCCCCGCTGATGCAAGATGGCAGATCTGATACCCATTAGAGCCCCGAGAATTCCTCTTCTGGATCCCAG TTTGCAGCAAACCCCACACCCCAGCTCACACAGCAAAAACAATGGACAGGCCCAGAGGCTGAAGCAAACAGTGTC CCTAGGCTTGTCAAGAATCTGTTCAGTCCCTCTCTCTCAATAAAAGCATCTTCAAGCTTGT

316/6881 FIGURE 296

 ${\tt GGGAGAAAGCCTGTTGCGTGGAAGATAAGGCGGCGCGCGGGAAGTGGACACAGGGTGGGCTCAGATCTAAC}$ TGGACTCTCGCTCCTGCTGGCTGGACATCGAGGATTTGGAGGAAGATGTAAGGTTTATTGTGGATGAGACCTTGG ACTTTGGGGGGCTGTCACCATCTGACAGCCGTGAGGAAGACATAACAGTGTTGGTGACTCCAGAGAAACCAC TTCGACGGGCCTCTCCCACCGAAGTGACCCAAATGCAGTGGCACCTGCCCCCCAGGGTGTGAGGCTCAGCCTAG GCCCCCTCAGTCCAGAGAAGCTGGAGGAGATCCTCGATGAGGCCAACCGGCTGGCCGCTCAGCTGGAGCAGTGTG CCCTGCAGGATCGGGAGAGCGCAGGGGGCCTGGGGCCTCGCCGAGTGAAGCCCAGTCCTCGGCGGGAGACCT TTGTGCTGAAGGATAGTCCTGTCCGAGACCTGCTGCCCACTGTGAACTCTTTGACGCGGAGCACCCCCTCCCCAA GGCCCTCCAACATGAAGAGGGAGTCACCCACTTGCAATCTGTTCCCTGCATCCAAAAGCCCAGCATCTTCTCCTC TCAGATCCGTCCTGGCCCCACAGCCTTCTACCAGCAACTCTCAACGCCTGCCCCGGCCGCAGGGAGCAGCTGCTA AATCTTCCAGTCAACTGCCCATTCCCTCGGCCATCCCCAGGCCTGCCAGCCGAATGCCACTCACCAGCCGGAGTG TGCCACCTGGCAGAGGTGCCCTACCTCCGGATTCTCTGTCAACTCGAAAAGGGCTTCCAAGACCAAGCACTGCAG GACACAGAGTGCGGGAAAGTGGACACAAGGTTCCTGTTTCCCAGCGACTAAATCTTCCTGTCATGGGTGCCACTC GCAGCAATCTGCAGCCCCCCAGGAAAGTGGCAGTCCCAGGACCTACCAGG<u>TAA</u>AGAGATCAGGACAGCAAGCAAG ACTTCAGTAGCAAACCACTACAGTCAGTACCTGGACTCGCCTCTACCCAGCAGACCCTGACTCCAGCAGATTCTG GCCCAGGGACAGGAGGAGAGATGCCACCAGGGCTGGTCTCCCAGGAGTAGAGACCATGGGAAATGGGGTGGATT AGGATTGAGCTGGAGAAGACTTAAACTCTCTGGGTTGAAAGAAGATTAGGGGAAAAGAGGTCACCTTCCAGCAGT GAAATGAACAAATAGAAGATGAGAAGTACAGGCAAGTGGTTTGTCTTTATCCACCCCCACTGTTGTGGTCAGCCC CAGAGAATTTTATCTTCTTCCTTGGCATTGGTTCACTGGACATTTCCACGTGAGCGGCCTCCGTAGCTAACCTCC CTGCCCTCTGAGGAGCCATCTTCCTGAATCGCATTCTCTACTGGACTCTGGCCTGCTTGGAGAGGTGGCAGCAGG CACCTGGTCTTCAGAAATTGTTTCCTGTGAATTCTGTGACTCCTAATAGGCCAGTTTGTGATAAGCTTACTCTAT

317/6881 FIGURE 297

MEDLEEDVRFIVDETLDFGGLSPSDSREEEDITVLVTPEKPLRRGLSHRSDPNAVAPAPQGVRLSLGPLSPEKLE EILDEANRLAAQLEQCALQDRESAGEGLGPRRVKPSPRRETFVLKDSPVRDLLPTVNSLTRSTPSPSSLTPRLRS NDRKGSVRALRATSGKRPSNMKRESPTCNLFPASKSPASSPLTRSTPPVRGRAGPSGRAAASPPTPIRSVLAPQP STSNSQRLPRPQGAAAKSSSQLPIPSAIPRPASRMPLTSRSVPPGRGALPPDSLSTRKGLPRPSTAGHRVRESGH KVPVSQRLNLPVMGATRSNLQPPRKVAVPGPTR

318/6881 FIGURE 298

GCAGTGCGGCGGTCACAGGCTGAGTGCTGCGGCGCGATCCTTGCTTCCCTGAGCGTTGGCCCGGGAGGAAAGAAG ATGGTGCTGGATCTGGATTTGTTTCGGGTGGATAAAGGAGGGGACCCAGCCCTCATCCGAGAGACGCAGGAGAAG CGCTTCAAGGACCCGGGACTAGTGGACCAGCTGGTGAAGGCAGACAGCGAGTGGCGACGATGTAGATTTCGGGCA GACAACTTGAACAAGCTGAAGAACCTATGCAGCAAGACAATCGGAGAGAAAATGAAGAAAAAAAGAGCCAGTGGGA GATGATGAGTCTGTCCCAGAGAATGTGCTGAGTTTCGATGACCTTACTGCAGACGCTTTAGCTAACCTGAAAGTC TCACAAATCAAAAAAGTCCGACTCCTCATTGATGAAGCCATCCTGAAGTGTGACGCGGAGCGGATAAAGTTGGAA GCAGAGCGGTTTGAGAACCTCCGAGAGATTGGGAACCTTCTGCACCCTTCTGTACCCATCAGTAACGATGAGGAT GTGGACAACAAGTAGAGAGGATTTGGGGTGATTGTACAGTCAGGAAGAAGTACTCTCATGTGGACCTGGTGGTG ATGGTAGATGGCTTTGAAGGCGAAAAGGGGGCCGTGGTGGCTGGGAGTCGAGGGTACTTCTTGAAGGGGGTCCTG GTGTTCCTGGAACAGGCTCTCATCCAGTATGCCCTTCGCACCTTGGGAAGTCGGGGCTACATTCCCATTTATACC CCCTTTTCATGAGGAGGAGGTCATGCAGGAGGTGGCACAGCTCAGCCAGTTTGATGAAGAACTTTATAAGGTG ATTGGCAAAGGCAGTGAAAAGTCTGATGACAACTCCTATGATGAGAAGTACCTGATTGCCACCTCAGAGCAGCCC ATTGCTGCCCTGCACCGGGATGAGTGGCTCCGGCCGGAGGACCTGCCCATCAAGTATGCTGGCCTGTCTACCTGC TTCCGTCAGGAGGTGGGCTCCCATGGCCGTGACACCCGTGGCATCTTCCGAGTCCATCAGTTTGAGAAGATTGAA CAGTTTGTGTACTCATCACCCCATGACAACTCATGGGAGATGTTTGAAGAGATGATTACCACCGCAGAGGAG TTCTACCAGTCCCTGGGGATTCCTTACCACATTGTGAATATTGTCTCAGGTTCTTTGAATCATGCTGCCAGTAAG AAGCTTGACCTGGAGGCCTGGTTTCCGGGCTCAGGAGCCTTCCGTGAGTTGGTCTCCTGTTCTAATTGCACGGAT TACCAGGCTCGCCGGCTTCGAATCCGATATGGGCAAACCAAGAAGATGATGGACAAGGTGGAGTTTGTCCATATG ACTGTGCCTGAGAAATTGAAGGAGTTCATGCCGCCAGGACTGCAAGAACTGATCCCCTTTGTGAAGCCTGCGCCC ACCCTAGAAAACAGGCTGCAGAACATGGAGGTCACCGATGCTTGAACATTCCTGCCTCCCTATTTGCCAGGCTTT CATTTCTGTCTGAGATCTCAGAGCCTGCCCAACAGCAGGGAAGCCAAGCACCCATTCATCCCCCTGCCCCCA TCTGACTGCGTAGCTGAGAGGGGAACAGTGCCATGTACCACACAGATGTTCCTGTCTCCTCGCATGGGCATAGGG ACCCATCATTGATGACTGATGAAACCATGTAATAAAGCATCTCTGGGGAGGGCTTAGGACTCTTCCTCAGTCTTC

319/6881 FIGURE 299

MVLDLDLFRVDKGGDPALIRETQEKRFKDPGLVDQLVKADSEWRRCRFRADNLNKLKNLCSKTIGEKMKKKEPVG
DDESVPENVLSFDDLTADALANLKVSQIKKVRLLIDEAILKCDAERIKLEAERFENLREIGNLLHPSVPISNDED
VDNKVERIWGDCTVRKKYSHVDLVVMVDGFEGEKGAVVAGSRGYFLKGVLVFLEQALIQYALRTLGSRGYIPIYT
PFFMRKEVMQEVAQLSQFDEELYKVIGKGSEKSDDNSYDEKYLIATSEQPIAALHRDEWLRPEDLPIKYAGLSTC
FRQEVGSHGRDTRGIFRVHQFEKIEQFVYSSPHDNKSWEMFEEMITTAEEFYQSLGIPYHIVNIVSGSLNHAASK
KLDLEAWFPGSGAFRELVSCSNCTDYQARRLRIRYGQTKKMMDKVEFVHMLNATMCATTRTICAILENYQTEKGI
TVPEKLKEFMPPGLQELIPFVKPAPIEQEPSKKQKKQHEGSKKKAAARDVTLENRLQNMEVTDA

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320/6881 FIGURE 300

CAGAGTGCCCTTTCTCCCCGCCTCTCCCGGGAGCTGCCAGTACTTGACGTGGCGTCACCGCCCTCTAC ${\tt CCTCGCTTTGCGTGCTGTTTGCGTACAGCGGAGGTGGCGGCGCGGGCAGGTCGGAGCTGCTGCTTCT}$ GGTTCTCTTGTGGCCACCGTCGCTGTCCGGCTGCCTTGGGCTGCCGAACAGACAAGGCGTGGGCCACAGCACCTC AGAAGCCGACGCAGCTCGACGCAGGGGCCGGCAGGAGGGTGGGCGATCGCGTGTCGGAGGGCCCCGCGGGGCAG GCGGGCGGCGCCAGAGGGGGAAAGAGGCGGGGGCGGCGGGTCAGCCGCTGGCCGGGCCGGGGGAATGTCGA TGCCTGACGCGATGCCGCTGCCCGGGGTCGGGGAGGAGCTGAAGCAGGCCAAGGAGATCGAGGACGCCGAGAAGT ACTCCTTCATGGCCACCGTCACCAAGGCGCCCAAGAAGCAAATCCAGTTTGCTGATGACATGCAGGAGTTCACCA CTGCATCCTACACAGATAGCTCTGATGATGAGGTTTCTCCCCGAGAGAAGCAGCAAACCAACTCCAAGGGCAGCA GCAATTTCTGTGTGAAGAACATCAAGCAGGCAGAATTTGGACGCCGGGAGATTGAGATTGCAGAGCAAGACATGT CTGCTCTGATTTCACTCAGGAAACGTGCTCAGGGGGAGAAGCCCTTGGCTGGTGCTAAAATAGTGGGCTGTACAC ACATCACAGCCCAGACAGCGGTGTTGATTGAGACACTCTGTGCCCTGGGGGGCTCAGTGCCGCTGGTCTGCTTGTA ACATCTACTCAACTCAGAATGAAGTAGCTGCAGCACTGGCTGAGGCTGGAGTTGCAGTGTTCGCTTGGAAGGGCG ATGATGGGGGAGACTTAACCCACTGGGTTTATAAGAAGTATCCAAACGTGTTTAAGAAGATCCGAGGCATTGTGG AAGAGAGCGTGACTGGTGTTCACAGGCTGTATCAGCTCTCCAAAGCTGGGAAGCTCTGTGTTCCGGCCATGAACG TCAATGATTCTGTTACCAAACAGAAGTTTGATAACTTGTACTGCTGCCGAGAATCCATTTTGGATGGCCTGAAGA GGACCACAGATGTGATGTTTGGTGGGAAACAAGTGGTGGTGTGTGGCTATGGTGAGGTAGGCAAGGGCTGCTGTG CTGCTCTCAAAGCTCTTGGAGCAATTGTCTACATTACCGAAATCGACCCCATCTGTGCTCTGCAGGCCTGCATGG ATGGGTTCAGGGTGGTAAAGCTAAATGAAGTCATCCGGCAAGTCGATGTCGTAATAACTTGCACAGGAAATAAGA ATGTAGTGACACGGGAGCACTTGGATCGCATGAAAAACAGTTGTATCGTATGCAATATGGGCCACTCCAACACAC AAATCGATGTGACCAGCCTCCGCACTCCGGAGCTGACGTGGGAGCGAGTACGTTCTCAGGTGGACCATGTCATCT GGCCAGATGGCAAACGAGTTGTCCTCCTGGCAGAGGGTCGTCTACTCAATTTGAGCTGCTCCACAGTTCCCACCT TTGTTCTGTCCATCACAGCCACAACACGGCTTTGGCACTGATAGAACTCTATAATGCACCCGAGGGGCGATACA AGCAGGATGTGTACTTGCTTCCTAAGAAAATGGATGAATACGTTGCCAGCTTGCATCTGCCATCATTTGATGCCC ACCTTACAGAGCTGACAGATGACCAAGCAAAATATCTGGGACTCAACAAAAATGGGCCATTCAAACCTAATTATT ACAGATACTAATGGACCATACTACCAAGGACCAGTCCACCTGAACCACACTCTAAAGAAATATTTTTTAAGAT AACTTTTATTTCTTCTTACTCCTTTCCTCTTGATTTTTTTCCTATAATTTCATTCTTGTTTTTTCATCTCATTA TCCAAGTTCTGCAGACCACACAGGAACTTGCTTCATGGCTCTTTAGATGAAATAGAAGTTCAGGGTCCCTCACTC TAGTCACTAAAGAAGGATTTTACTCCCCCAGCCCAGAAAGGTGATTCTTCTCTTTACCATTTCTGGGGACTTTAG TCTTAATTAGGTACCTTATTAACAGGAAATGCTAAGGTACCTTCTCTGTGGAACAATCTGCAATGTCTAAATCGC CTTAAAAGAGCCCATTTCTTAGCTGCTGAAATCAGTGCTCTTTCACTTCTTCAGAGAAGCAGGGATGGTACCTAC CCGGCAGGTAGGTTAGATGTGGGTGGTGCATGTTAATTTCCCTTAGAAGTTCCAAGCCCTGTTTCCTGCGTAAAG GTGGTATGTCCAGTTCAGAGATGTGTATAATGAGCATGGCTTGTTAAGATCAGGAGGCCCACTTGGATTTATAGT ATAGCCCTTCCTCCACTCCACCAGACTTGCTCATTTTTCGAGTTTTTAACTAGACTACACTCTATTTGAGTTTA

321/6881 FIGURE 301

MSMPDAMPLPGVGEELKQAKEIEDAEKYSFMATVTKAPKKQIQFADDMQEFTKFPTKTGRRSLSRSISQSSTDSY SSAASYTDSSDDEVSPREKQQTNSKGSSNFCVKNIKQAEFGRREIEIAEQDMSALISLRKRAQGEKPLAGAKIVG CTHITAQTAVLIETLCALGAQCRWSACNIYSTQNEVAAALAEAGVAVFAWKGESEDDFWWCIDRCVNMDGWQANM ILDDGGDLTHWVYKKYPNVFKKIRGIVEESVTGVHRLYQLSKAGKLCVPAMNVNDSVTKQKFDNLYCCRESILDG LKRTTDVMFGGKQVVVCGYGEVGKGCCAALKALGAIVYITEIDPICALQACMDGFRVVKLNEVIRQVDVVITCTG NKNVVTREHLDRMKNSCIVCNMGHSNTEIDVTSLRTPELTWERVRSQVDHVIWPDGKRVVLLAEGRLLNLSCSTV PTFVLSITATTQALALIELYNAPEGRYKQDVYLLPKKMDEYVASLHLPSFDAHLTELTDDQAKYLGLNKNGPFKP NYYRY

322/6881 FIGURE 302A

GCTTATGGCGGCGCTGGAGAGGGGGCGCTGAGCTGTTGGGTATGAAGTGTAACAGAACAGACTTTACCACCTGAA ACTGCTGCTTCAAGTTCAGATCAGGCAAGGAACAAACCTCGTAACAACTAACAAGACCAAAGAAGAGTACACTTA AGTTGAAGACACACACTTGATCTGAAACAAGAAGTTTGTGCCTACTCAACAGCTTTGAAAGAGCACTTCCCAAC GCTGCTAGTAGTCTTTGTTTTCTTCAGTGCTGTACTGTGAGATTGCCCGGTACAGCAGCAGTTGTATTCTTTATT AGCTTGGTAGATCATTTTCTCTCGCTCTTTTTTTTAATACTAGCAACTTTCATCCTTTGAAACGTGTGCTGAAAA AGAAGAATCAGCAAATACTACTGAAAGTGCAATATTTGAGTATCACTGCGAGATGAGCTTTGATCCAAACCTTCT CCACAACAATGGACATAATGGGTACCCTAATGGTACTTCAGCAGCACTGCGTGAAACTGGGGTTATTGAAAAACT GTTAACCTCTTACGGATTTATTCAGTGTTCAGAACGTCAAGCTAGACTTTTCTTCCACTGTTCACAGTATAATGG CAACCTGCAAGACTTAAAAGTAGGAGATGATGTTGAATTTGAAGTATCATCGGACCGACGGACTGGGAAACCCAT TCCTCACAACTTAGAGAGTAAATCTCCAGCTGCCCCGGGTCAGAGTCCAACAGGGAGTGTATGCTACGAACGTAA TGGGGAAGTGTTTTATCTGACTTACACCCCTGAAGATGTCGAAGGGAACGTTCAGCTGGAAACTGGAGATAAAAT AAACTTTGTAATTGATAACAATAAACATACTGGTGCTGTAAGTGCTCGCAACATTATGCTGTTGAAAAAGAAACA AGCCCGCTGTCAGGGAGTAGTTTGTGCCATGAAGGAGGCATTTGGCTTTATTGAAAGAGGTGATGTTGTAAAAGA GATATTCTTTCACTATAGTGAATTTAAGGGTGACTTAGAAACCTTACAGCCTGGCGATGATGTGGAATTCACAAT CAAGGACAGAAATGGTAAAGAAGTTGCAACAGATGTCAGACTATTGCCTCAAGGAACAGTCATTTTTGAAGATAT CAGCATTGAACATTTTGAAGGAACTGTAACCAAAGTTATCCCAAAAGTACCCAGTAAAAACCAGAATGACCCATT GCCAGGACGCATCAAAGTTGACTTTGTGATCCCTAAAGAACTTCCCTTTGGAGACAAAGATACGAAATCCAAGGT TATAGAAGTTCTGTCAAATACATTTCAGTTCACTAATGAAGCCCGAGAAATGGGTGTGATTGCTGCCATGAGAGA TGGTTTTGGTTTCATCAAGTGTGTGGATCGTGATGTTCGTATGTTCTTCCACTTCAGTGAAATTCTGGATGGGAA CCAGCTCCATATTGCAGATGAAGTAGAGTTTACTGTGGTTCCTGATATGCTCTCTGCTCAAAGAAATCATGCTAT AAAAGAAGCCACTTTTTCCAATCCTAAAACCACTAGCCCAAATAAAGGCAAAGAAGAAGGAGGCTGAGGATGGCAT TATTGCTTATGATGACTGTGGGGTGAAACTGACTATTGCTTTTCAAGCCAAGGATGTGGAAGGATCTACTTCTCC TCAAATAGGAGATAAGGTTGAATTTAGTATTAGTGACAAACAGAGGCCTGGACAGCAGGTTGCAACTTGTGTGCG ACTTTTAGGTCGTAATTCTAACTCCAAGAGGCTCTTGGGTTATGTGGCAACTCTGAAGGATAATTTTGGATTTAT TGAAACAGCCAATCATGATAAGGAAATCTTTTTCCATTACAGTGAGTTCTCTGGTGATGTTGATAGCCTGGAACT GGGGGACATGGTCGAGTATAGCTTGTCCAAAGGCAAAGGCAACAAGTCAGTGCAGAAAAAGTGAACAAAACACA CTCAGTGAATGGCATTACTGAGGAAGCTGATCCCACCATTTACTCTGGCAAAGTAATTCGCCCCCTGAGGAGTGT TGATCCAACAGACTGAGTACCAAGGAATGATTGAGATTGTGGAGGAGGGCGATATGAAAGGTGAGGTCTATCC ATTTGGCATCGTTGGGATGGCCAACAAAGGGGATTGCCTGCAGAAAGGGGAGAGCGTCAAGTTCCAATTGTGTGT CCTGGGCCAAAATGCACAAACTATGGCTTACAACATCACACCCCTGCGCAGGGCCACAGTGGAATGTGTGAAAGA TCAGTTTGGCTTCATTAACTATGAAGTAGGAGATAGCAAGAAGCTCTTTTTCCATGTGAAAGAAGTTCAGGATGG CATTGAGCTACAGGCAGAGATGAGGTGGAGTTCTCAGTGATTCTTAATCAGCGCACTGGCAAGTGCAGCGCCTG TAATGTTTGGCGAGTCTGTGAGGGCCCCAAGGCTGTTGCAGCTCCTCGACCTGATCGGTTGGTCAATCGCTTGAA GAATATCACTCTGGATGATGCCAGTGCTCCTCGCCTAATGGTTCTTCGTCAGCCAAGGGGACCAGATAACTCAAT GGGGTTTGGTGCAGAAAGAAGATCCGTCAAGCTGGTGTCATTGAC<u>TAA</u>CCACATCCACAAAGCACACCATTAAT AGAAAACCATTTTAAATAATGCACAGTTGCAGCCTGGAAAAACTTAAGGTGGCGCCTTATAGTATCAATTTTAGG AGCTTTATTTGGTGCATTTAACGCAACTGGTAATTGCAGAATCCACTTTGCCTGTGTAAGTGAAAAATATAGACT GTTCTGCCTTAGCACTCAGTTGCATTCTTTTCCTTTTTCCTGTTCATTATGCTTTAATTCTGAGGACCATAT GAGGGTAGAATATTATCTTTTAAAAATTACAAAAATTTGTATAGGCAAACCATTTCTTAAAGTTGATGGCCAA ATTTTAAAATGTTATTTTCATATCATTTATAATCTTGTCACAATCCACTTAAAGAAGTTTGGTTATATTTCAGT

323/6881 FIGURE 302B

324/6881 FIGURE 303

MSFDPNLLHNNGHNGYPNGTSAALRETGVIEKLLTSYGFIQCSERQARLFFHCSQYNGNLQDLKVGDDVEFEVSS
DRRTGKPIAVKLVKIKQEILPEERMNGQVVCAVPHNLESKSPAAPGQSPTGSVCYERNGEVFYLTYTPEDVEGNV
QLETGDKINFVIDNNKHTGAVSARNIMLLKKKQARCQGVVCAMKEAFGFIERGDVVKEIFFHYSEFKGDLETLQP
GDDVEFTIKDRNGKEVATDVRLLPQGTVIFEDISIEHFEGTVTKVIPKVPSKNQNDPLPGRIKVDFVIPKELPFG
DKDTKSKVTLLEGDHVRFNISTDRRDKLERATNIEVLSNTFQFTNEAREMGVIAAMRDGFGFIKCVDRDVRMFFH
FSEILDGNQLHIADEVEFTVVPDMLSAQRNHAIRIKKLPKGTVSFHSHSDHRFLGTVEKEATFSNPKTTSPNKGK
EKEAEDGIIAYDDCGVKLTIAFQAKDVEGSTSPQIGDKVEFSISDKQRPGQQVATCVRLLGRNSNSKRLLGYVAT
LKDNFGFIETANHDKEIFFHYSEFSGDVDSLELGDMVEYSLSKGKGNKVSAEKVNKTHSVNGITEEADPTIYSGK
VIRPLRSVDPTQTEYQGMIEIVEEGDMKGEVYPFGIVGMANKGDCLQKGESVKFQLCVLGQNAQTMAYNITPLRR
ATVECVKDQFGFINYEVGDSKKLFFHVKEVQDGIELQAGDEVEFSVILNQRTGKCSACNVWRVCEGPKAVAAPRP
DRLVNRLKNITLDDASAPRLMVLRQPRGPDNSMGFGAERKIRQAGVID

325/6881 FIGURE 304

326/6881 FIGURE 305

 ${\tt MGATLKIMLDNTYMKKCDENILWLDYKNICKVMEVGSKIYVDDGLISLQVKQKGADFLVTEVETGGSSGSKKGVNLPGAAVDLPAVSEDIQDLNFGVEQDVDMVFASFIRKASDVHEVREALGEKGKKTLHPPPSIFPHYCSTSGPVAIEPTCISINNS$

327/6881 FIGURE 306

AGAAGAAGCTGGCCAAGGATATGGGAGCAACCACCATGGACCAGAAGTCTCTCTGGGCAGGTGTAGTGGTCTTGC TGCTTCTCCAGGGAGGATCTGCCTACAAACTGGTTTGCTACTTTACCAACTGGTCCCAGGACCGGCAGGAACCAG ACAAGGTTATCATCAAGGACAAGAGTGAAGTGATGCTCTACCAGACCATCAACAGTCTCAAAACCAAGAATCCCA AACTGAAAATTCTCTTGTCCATTGGAGGGTACCTGTTTGGTTCCAAAGGGTTCCACCCTATGGTGGATTCTTCTA CATCACGCTTGGAATTCATTAACTCCATAATCCTGTTTCTGAGGAACCATAACTTTGATGGACTGGATGTAAGCT GGATCTACCCAGATCAGAAAGAAACACTCATTTCACTGTGCTGATTCATGAGTTAGCAGAAGCCTTTCAGAAGG GCTATCAAGTTGAGAAACTGGCAAAAGATCTGGATTTCATCAACCTCCTGTCCTTTGACTTCCATGGGTCTTGGG AAAAGCCCCTTATCACTGGCCACAACAGCCCTCTGAGCAAGGGGTGGCAGGACAGAGGGCCCAAGCTCCTACTACA ATGTGGAATATGCTGTGGGGTACTGGATACATAAGGGAATGCCATCAGAGAAGGTGGTCATGGGCATCCCCACAT ATGGGCACTCCTTCACACTGGCCTCTGCAGAAACCACCGTGGGGGCCCCTGCCTCTGGCCCTGGAGCTGCTGGAC CCATCACAGAGTCTTCAGGCTTCCTGGCCTATTATGAGATCTGCCAGTTCCTGAAAGGAGCCAAGATCACGCGCC ${\tt CCAAGGTTCAGTTCTTAAAGAATTTAAACCTGGGAGGAGCCATGATCTGGTCTATTGACATGGATGACTTCACTG}$ GCAAATCCTGCAACCAGGGCCCTTACCCTCTTGTCCAAGCAGTCAAGAGAAGCCTTGGCTCCTTG<u>TGA</u>AGGATTA ACTTACAGAGAAGCAGGCAAGATGACCTTGCTGCCTGGGGCCTGCTCTCCCCAGGAATTCTCATGTGGGATTCC CCTTGCCAGGCTGGCCTTTGGATCTCTCTTCCAAGCCTTTCCTGACTTCCTCTTAGATCATAGATTGGACCTGGT

328/6881 FIGURE 307

MDQKSLWAGVVVLLLLQGGSAYKLVCYFTNWSQDRQEPGKFTPENIDPFLCSHLIYSFASIENNKVIIKDKSEVM LYQTINSLKTKNPKLKILLSIGGYLFGSKGFHPMVDSSTSRLEFINSIILFLRNHNFDGLDVSWIYPDQKENTHF TVLIHELAEAFQKDFTKSTKERLLLTAGVSAGRQMIDNSYQVEKLAKDLDFINLLSFDFHGSWEKPLITGHNSPL . SKGWQDRGPSSYYNVEYAVGYWIHKGMPSEKVVMGIPTYGHSFTLASAETTVGAPASGPGAAGPITESSGFLAYY EICQFLKGAKITRLQDQQVPYAVKGNQWVGYDDVKSMETKVQFLKNLNLGGAMIWSIDMDDFTGKSCNQGPYPLV QAVKRSLGSL

329/6881 FIGURE 308

GGGGAGACTTGTGAGCGGCCATCTTGGTCCTGCCCTGACAGATTCTCCTATCGGGGTCACAGGACGCTAAGATT GCTACCTGGACTTTCGTTGACCATGCTGTCCCGGGTGGTACTTTCCGCCGCCGCCACAGCGGCCCCCTCTCTGAA GAATGCAGCCTTCCTAGGTCCAGGGGTATTGCAGGCAACAAGGACCTTTCATACAGGGCAGCCACACCTTGTCCC TGTACCACCTCTTCCTGAATACGGAGGAAAAGTTCGTTATGGACTGATCCCTGAGGAATTCTTCCAGTTTCTTTA TCCTAAAACTGGTGTAACAGGACCCTATGTACTCGGAACTGGGCTTATCTTGTACGCTTTATCCAAAGAAATATA TGTGATTAGCGCAGAGACCTTCACTGCCCTATCAGTACTAGGTGTAATGGTCTATGGAATTAAAAAATATGGTCC CTTTGTTGCAGACTTTGCTGATAAACTCAATGAGCAAAAACTTGCCCAACTAGAAGAGGCGAAGCAGGCTTCCAT CCAACACATCCAGAATGCAATTGATACGGAGAAGTCACAACAGGCACTGGTTCAGAAGCGCCATTACCTTTTTGA AAAGAATCGCCTGGACTATCATATATCTGTGCAGAACATGATGCGTCGAAAGGAACAAGAACACATGATAAATTG GGTGGAGAGCACGTGGTGCAAAGCATCTCCACACAGCAGGAAAAGGAGACAATTGCCAAGTGCATTGCGGACCT AGTTGACTGACTAAATGGAAACTAGTCTATTTGACAAAGTCTTTCTGTGTTGGTGTCTACTGAAGTTATAGTTTA CCCTTCCTAAAAATGAAAAGTTTGTTTCATATAGTGAGAGAACGAAATCTCTATCGGCCAGTCAGATGTTTCTCA TCCTTCTTGCTCTGCCTTTGAGTTGTTCCGTGATCACTTCTGAATAAGCAGTTTGCCTTTATAAAAACTTGCTGC CTGACTAAAGATTAACAGGTTATAGTTTAAATTTGTAATTCTACCATCTTGCAATAAAGTGACAATTGAAT AAAAAAAAAAAAAAAAAAAAAAAAAA

330/6881 FIGURE 309

MLSRVVLSAAATAAPSLKNAAFLGPGVLQATRTFHTGQPHLVPVPPLPEYGGKVRYGLIPEEFFQFLYPKTGVTG
PYVLGTGLILYALSKEIYVISAETFTALSVLGVMVYGIKKYGPFVADFADKLNEQKLAQLEEAKQASIQHIQNAI
DTEKSQQALVQKRHYLFDVQRNNIAMALEVTYRERLYRVYKEVKNRLDYHISVQNMMRRKEQEHMINWVEKHVVQ
SISTQQEKETIAKCIADLKLLAKKAQAQPVM

331/6881 FIGURE 310

GCGGGGAGCCGGCCCGGAGCGCAGTTTCCAGTGGGGCCGGGGTTTCACCCGGGCCCTCTCTGTTTGAACCGAACC ${\tt CCATGAAGGAGGTGGGTGATGGCTTACAGGATCAGATGAACTGCATGATGGGTGCACTGCAAGAACTGAAGCTCC}$ TCCAGGTGCAGACAGCACTGGAACAGCTGGAGATCTCTGGAGGGGGGTCCTGTGCCAGGCAGCCCTGAAGGTCCCA GGACCCAGTGCGAGCACCCTTGTTGGGAGGGTGGCAGAGGTCCTGCCAGGCCCACAGTCTGTTCCCCCTCCAGTC AACCTTCTCTTGGCAGCACCACGTTTCCATCCCATAGGAGTGTCTGTGGAAGGGATTTAGCCCCCTTGCCCA GGACACAGCCACATCAAAGCTGTGCTCAGCAGGGGCCAGAGCGAGTGGAACCGGATGACTGGACCTCCACGTTGA TGTCCCGGGGCCGGAATCGACACCTCTGGTGTTAGGGGACAACGTTTTTGCAGACCTGGTGGGCAATTGGCTAG AGCCCCAGGAGCTGGGCCGCAGGTTCGCCCTGACAGCAAACATCTTTAAGAAGTTCTTGCGTAGTGTGCGGCCTG ${\tt ACCGTGACCGGCIGCTGAAGGAAGCCAGGCTGGGTGACACCCATGGTCCCTGAGTCCCGAACCGGCCGCTCAC}$ AGAAGGTCAAGAAGCGGAGCCTTTCCAAGGGCTCTGGACATTTCCCCTTCCCAGGCACCGGGGAGCACAGGCGAG GGGAGAATCCCCCCACAAGCTGCCCCAAGGCCCTGGAGCACTCACCCTCAGGATTTGATATTAACACAGCTGTTT GGGTC<u>TGA</u>ATCCTAGAGACAGAAAGTTGACTGAGCCTGAAAGGGCCAGGTCCCAGTGCTGGGCCCCTGGGGAGGA GGGAGGGTGGGCGGTATGGCTCTCGAAAGCCCAACTCCAAGTTCCTTTCCCCCAGAAAGCCGGGGAGAAGCCAGAG TTCTTGGCTCAGGACTGAAGGGAAGGTTGTGGGAGAGGCTGTCTTGGGGGCTAGCTGGTGGAGGAGGTAAGAGT TGGGGCTGGAGGTGACAGTAGGTGAGGGCAGAGGAGGAGAAAATCCCTCTGACATCTCCACTGCCCCCAA AGACCTCCGTTGAACATTCTGTATGGAAAAGAGCCCTGGAGCATCAGGTTCCCCAGATAGGCCCCCAAATAAAGA CCTGTCTATGGCTCTCCCAA

332/6881 FIGURE 311

 $\label{thm:maskembcylrrlkqelmsmkevgdglqdqmncmmgalqelkllqvqtaleqleisgggpvpgspegprtqce} \\ HPCWEGGRGPARPTVCSPSSQPSLGSSTKFPSHRSVCGRDLAPLPRTQPHQSCAQQGPERVEPDDWTSTLMSRGR \\ NRQPLVLGDNVFADLVGNWLDLPELEKGGEKGETGGAREPKGEKGQPQELGRRFALTANIFKKFLRSVRPDRDRL \\ LKEKPGWVTPMVPESRTGRSQKVKKRSLSKGSGHFPFPGTGEHRRGENPPTSCPKALEHSPSGFDINTAVWV \\ \end{aligned}$

333/6881 FIGURE 312A

TCCCTCCACTTGGCTCCCCTGGTCCCGCTCGCCCGGGGGGGCTGCTCTGTGCTTTTCTCTCTGATTCTCCAGC GACAGGACCCGGCGCCGGGCACTGAGCACCGCCACC<u>ATG</u>GGGAAGGGGGTTGGACGTGATAAGTATGAGCCTGCA GTTTCTATGGATGATCATAAACTTAGCCTTGATGAACTTCATCGTAAATATGGAACAGACTTGAGCCGGGGATTA TGGATCAAGTTTTGTCGGCAGCTCTTTGGGGGGTTCTCAATGTTACTGTGGATTGGAGCGATTCTTTGTTTCTTG GCTTATAGCATCCAAGCTGCTACAGAAGAGGAACCTCAAAACGATAATCTGTACCTGGGTGTGGTGCTATCAGCC GTTGTAATCATAACTGGTTGCTTCTCCTACTATCAAGAAGCTAAAAGTTCAAAGATCATGGAATCCTTCAAAAAC ATGGTCCCTCAGCAAGCCCTTGTGATTCGAAATGGTGAGAAAATGAGCATAAATGCGGAGGAAGTTGTGGTTGGG GATCTGGTGGAAGTAAAAGGAGGAGACCGAATTCCTGCTGACCTCAGAATCATATCTGCAAATGGCTGCAAGGTG GATAACTCCTCGCTCACTGGTGAATCAGAACCCCAGACTAGGTCTCCAGATTTCACAAATGAAAACCCCCTGGAG ACGAGGAACATTGCCTTCTTTTCAACCAATTGTGTTGAAGGCACCGCACGTGGTATTGTTGTCTACACTGGGGAT CGCACTGTGATGGGAAGAATTGCCACACTTGCTTCTGGGCTGGAAGGAGGCCAGACCCCCATTGCTGCAGAAATT GAGTACACCTGGCTTGAGGCTGTCATCTTCCTCATCGGTATCATCGTAGCCAATGTGCCGGAAGGTTTGCTGGCC ACTGTCACGGTCTGTCTGACACTTACTGCCAAACGCATGGCAAGGAAAAACTGCTTAGTGAAGAACTTAGAAGCT GTGGAGACCTTGGGGTCCACATCCACCATCTGCTCTGATAAAACTGGAACTCTGACTCAGAACCGGATGACAGTG GCCCACATGTGGTTTGACAATCAAATCCATGAAGCTGATACGACAGAGAATCAGAGTGGTGTCTCTTTTGACAAG ACTTCAGCTACCTGGCTTGCTCTGTCCAGAATTGCAGGTCTTTGTAACAGGGCAGTGTTTCAGGCTAACCAGGAA AACCTACCTATTCTTAAGCGGGCAGTTGCAGGAGATGCCTCTGAGTCAGCACTCTTAAAGTGCATAGAGCTGTGC TGTGGTTCCGTGAAGGAGATGAGAAAAATACGCCAAAAATCGTCGAGATACCCTTCAACTCCACCAACAAGTAC CAGTTGTCTATTCATAAGAACCCCAACACTCAGAGCCCCAACACCTGTTGGTGATGAAGGGCCCCCAGAAAGG ATCCTAGACCGTTGCAGCTCTATCCTCCTCCACGGCAAGGAGCAGCCCCTGGATGAGGAGCTGAAAGACGCCTTT CAGAACGCCTATTTGGAGCTGGGGGGCCTCGGAGAACGAGTCCTAGGTTTCTGCCACCTCTTTCTGCCAGATGAA CAGTTTCCTGAAGGGTTCCAGTTTGACACTGACGATGTGAATTTCCCTATCGATAATCTGTGCTTTGTTGGGCTC ATCTCCATGATTGACCCTCCACGGGCGGCCGTTCCTGATGCCGTGGGCAAATGTCGAAGTGCTGGAATTAAGGTC ATCATGGTCACAGGAGACCATCCAATCACAGCTAAAGCTATTGCCAAAGGTGTGGGCATCATCTCAGAAGGCAAT GAGACCGTGGAAGACATTGCTGCCCGCCTCAACATCCCAGTCAGCCAGGTGAACCCCAGGGATGCCAAGGCCTGC GTAGTACACGGCAGTGATCTAAAGGACATGACCTCCGAGCAGCTGGATGACATTTTGAAGTACCACACTGAGATA GTGTTTGCCAGGACCTCCCCTCAGCAGAAGCTCATCATTGTGGAAGGCTGCCAAAGACAGGGTGCTATCGTGGCT GTGACTGGTGACGGTGTGAATGACTCTCCAGCTTTGAAGAAAGCAGACATTGGGGTTGCTATGGGGATTGCTGGC TCAGATGTGTCCAAGCAAGCTGCTGACATGATTCTTCTGGATGACAACTTTGCCTCAATTGTGACTGGAGTAGAG GAAGGTCGTCTGATCTTTGATAACTTGAAGAAATCCATTGCTTATACCTTAACCAGTAACATTCCCGAGATCACC CCGTTCCTGATATTTATTATTGCAAACATTCCACTACCACTGGGGACTGTCACCATCCTCTGCATTGACTTGGGC ACTGACATGGTTCCTGCCATCTCCCTGGCTTATGAGCAGGCTGAGAGTGACATCATGAAGAGACAGCCCAGAAAT CCCAAAACAGACAAACTTGTGAATGAGCGGCTGATCAGCATGGCCTATGGGCAGATTGGAATGATCCAGGCCCTG GGAGGCTTCTTTACTTACTTGTGATTCTGGCTGAGAACGGCTTCCTCCCAATTCACCTGTTGGGCCTCCGAGTG GACTGGGATGACCGCTGGATCAACGATGTGGAAGACAGCTACGGGCAGCAGTGGACCTATGAGCAGAAGAAAATC GTGGAGTTCACCTGCCACACAGCCTTCTTCGTCAGTATCGTGGTGGTGCAGTGGGCCGACTTGGTCATCTGTAAG ACCAGGAGGAATTCGGTCTTCCAGCAGGGGATGAAGAACAAGATCTTGATATTTGGCCTCTTTGAAGAGACAGCC TTCTGTGCCTTCCCCTACTCTCTCTCTCTCTTCTTATTGACGAAGTCAGAAAACTCATCATCAGGCGACGCCCT GGCGGCTGGGTGGAGAAGGAAACCTACTAT<u>TAG</u>CCCCCCGTCCTGCACGCCGTGGAGCATCAGGCCACACACTCT GCATCCGACACCCACCCCTCTTTGTGTACTTCAGTCTTGGAGTTTGGAACTCTACCCTGGTAGGAAAGCACCGC

334/6881 FIGURE 312B

335/6881 FIGURE 313

MGKGVGRDKYEPAAVSEQGDKKGKKGKKDRDMDELKKEVSMDDHKLSLDELHRKYGTDLSRGLTSARAAEILARD
GPNALTPPPTTPEWIKFCRQLFGGFSMLLWIGAILCFLAYSIQAATEEEPQNDNLYLGVVLSAVVIITGCFSYYQ
EAKSSKIMESFKNMVPQQALVIRNGEKMSINAEEVVVGDLVEVKGGDRIPADLRIISANGCKVDNSSLTGESEPQ
TRSPDFTNENPLETRNIAFFSTNCVEGTARGIVVYTGDRTVMGRIATLASGLEGGQTPIAAEIEHFIHIITGVAV
FLGVSFFILSLILEYTWLEAVIFLIGIIVANVPEGLLATVTVCLTLTAKRMARKNCLVKNLEAVETLGSTSTICS
DKTGTLTQNRMTVAHMWFDNQIHEADTTENQSGVSFDKTSATWLALSRIAGLCNRAVFQANQENLPILKRAVAGD
ASESALLKCIELCCGSVKEMRERYAKIVEIPFNSTNKYQLSIHKNPNTSEPQHLLVMKGAPERILDRCSSILLHG
KEQPLDEELKDAFQNAYLELGGLGERVLGFCHLFLPDEQFPEGFQFDTDDVNFPIDNLCFVGLISMIDPPRAAVP
DAVGKCRSAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAARLNIPVSQVNPRDAKACVVHGSDLKDMTS
EQLDDILKYHTEIVFARTSPQQKLIIVEGCQRQGAIVAVTGDGVNDSPALKKADIGVAMGIAGSDVSKQAADMIL
LDDNFASIVTGVEEGRLIFDNLKKSIAYTLTSNIPEITPFLIFIIANIPLPLGTVTILCIDLGTDMVPAISLAYE
QAESDIMKRQPRNPKTDKLVNERLISMAYGQIGMIQALGGFFTYFVILAENGFLPHHLLGLRVDWDDRWINDVED
SYGQQWTYEQRKIVEFTCHTAFFVSIVVVQWADLVICKTRRNSVFQQGMKNKILIFGLFEETALAAFLSYCPGMG
VALRMYPLKPTWWFCAFPYSLLIFVYDEVRKLIIRRRPGGWVEKETYY

336/6881 FIGURE 314A

TTCCAAAACTGTTCTCTGGAGCTATAAGTGGATTGCCAGAAATGAGAGATTAGGAGCTGGGAGAAGAGGAAGCGC GTGGTGTCAGCACAGCGGCAGGTCACCGTTCAGGAAGGACCCTTGTACCGCACGGAGGGCTCCCACATCACTATC TGGTGCAATGTGAGTGGCTACCAGGGACCTTCTGAGCAGAATTTCCAGTGGTCCATTTACCTGCCTTCGTCGCCA GGGAAGATCTTCATAGAAAGAGTCCAGGGGAACTCAACCCTATTGCACATCACAGATCTTCAGGCCCGGGATGCC GGGGAGTATGAATGCCACACCCCAGCACTGATAAGCAATACTTTGGGAGTTACAGTGCAAAGATGAACCTAGTG GTGATCCCAGACTCCCTGCAGACCACTGCCATGCCCCAGACTCTGCACAGAGTGGAGCAGGACCCGCTGGAGCTC AAGCCCGTGGAGGTCATCTCCCTGAGCCGAGATTTCATGCTTCACTCCAGCAGCGAATATGCCCAGAGGCAGAGC CTGGGGGAGGTGCGGCTGGACAAGCTGGGGAGGACCACCTTCCGCCTCACCATCTTCCACCTGCAGCCTTCTGAC CAGGGCGAATTCTACTGCGAGGCCGCCGAGTGGATCCAGGATCCGGATGGGTCGTGGTATGCTATGACCCGAAAG CGTTCCGAGGGAGCCGTGGTCAACGTCCAGCCAACTGACAAAGAATTCACTGTTCGGCTGGAGACAGAAAGCGG CTGCACACGGTGGGCGAGCCGGTGGAGTTCAGATGCATCCTGGAGGCTCAGAATGTTCCCGACCGTTACTTTGCT GTCTCCTGGGCCTTCAACAGCTCGCTCATCGCCACCATGGGTCCTAACGCTGTGCCTGTCCTCAACAGCGAATTT GCTCACCGGGAAGCCAGGGGACAGCTTAAGGTGGCCAAAGAGACGGACAGTGTCTTTGTGCTGAAGATCTACCAC CTCCGCCAGGAAGATAGCGGGAAATACAACTGCCGGGTGACTGAGCGAGAAAAACCGTGACCGGGGAATTCATT GATAAGGAGCAAGCGTCCCAAGAACATCCCCATCATAGTCCTCCCCCTCAAGAGCAGCATCTCCGTGGAGGTG CAGGGTCGCTTCTCTGTCATCTGGCAGCTTGTGGACAGGCAGAACCGCCGCAGCAATATCATGTGGCTAGACCGG GATGGCACCGTGCAGCCAGGCTCGTCCTACTGGGAGCGCAGCAGCTTTGGGGGGCGTCCAGATGGAGCAGGTGCAG TGGGTGCGGGCAGTGGCGAGTGGCAGATTGTTGGGGAGCGCCGGGCCAGCACTCCCATCTCATCACAGCT TGTATCATCAAACCCCACTACCCTGGGTCCCCGTGTCGGTGACATGGCGGTTCCAGCCGGTGGCCACGGTG GAGTTCCATGACTTGGTGACCTTCACCCGGGACGGAGGGGTCCAGTGGGGGGACAGGTCCTCCAGCTTCCGAACC CGAACTGCCATCGAGAAGGCTGAGTCCAGCAACAACGTCCGCCTAAGCATCAGCCGAGCCAGTGACACGGAAGCA GGCAAGTACCAGTGTGGCGGAGCTGTGGCGGAAGAACTACAACAACACCTGGACGCGACTGGCGGAGAGGACC TCCAACCTGCTGGAGATCAGGGTGCTGCAGCCAGTGAGAAAGCTGCAGGTGAGCAAATCGAAGAGGACCCTCACC CTGGTGGAAAACAAGCCCATTCAGTTGAACTGCTCAGTCAAGTCTCAGACTAGCCAGAACTCCCACTTTGCGGTG TACGGTACTTACGCCGAGGAGGAGGGCCTGAGAGCCAGGCTCCAGTTTGAGAGGCATGTGTCGGGGGGGCCTGTTC AGCCTCACCGTCCAGAGAGCCGAGGTCAGCGACAGCGGCAGCTACTACTGCCACGTGGAGGAGTGGCTGAGC CCCAACTACGCCTGGTACAAGCTGGCAGAGGAGGTTTCTGGGCGCACAGAAGTCACTGTGAAACAGCCAGACAGC CTCAACCGCACCAGCATAACCTCCCAGCTCATGGTGGAATGGTTTGTATGGAAGCCCAACCACCCTGAGCGGGAG ACTGTGGCCCGCTTGAGCCGTGACGCCACCTTCCACTATGGAGGGCAGCCAGGCAAGAACAATCTGAAGGGGCGG CTGCATTTGGAGAGTCCTTCCCCCGGCGTGTACCGTCTCTTCATCCAGAACGTGGCTGTGCAGGACAGCGGGACC TACAGCTGCCATGTGGAGGAGTGGCTGCCCAGCCCCAGTGGCATGTGGTATAAGCGGGCAGAGGACACCGCTGGG CAGACAGCTCTGACAGTCATGCCACCAGATGCTTCCCTGCAGGTGGACACAGTGGTCCCCAATGCCACGGTCTCT TATTCCCTGAGGACTAAAGCTGGGGGGAAAAGGAGCAGCCCTGGCCTGGAAGAACAGGAAGAAGGGAAGGGAGGAG GAGGAGGAGGACGACGACGACGACCAACAGAGCGGACGCCCTGCTGAGCGTGGGCCCAGATGCT GTCTTTGGCCCAGAGGCCAGTCCTTGGGAGGGCAGGCTTCGCTTCCAGAGGCTCTCCCCGGTGCTCTACCGGCTC ACAGTGCTGCAGGCAAGCCCCCAAGATACAGGCAATTACTCCTGCCATGTGGAGGAGTGGCTGCCCAGCCCTCAG AAGGAATGGTACCGGCTGACGGAGGAGGAGTCAGCCCCCATCGGCATCCGTGTTCTAGATACAAGTCCCACCCTC CAGTCCATCATCTGCTCCAACGACGCACTCTTCTACTTCGTCTTCTTCTACCCTTTCCCCATCTTTGGCATTCTT ATCATCACCATCCTTCTGGTGCGTTTCAAGAGCCGGAACTCCAGCAAGAACTCTGATGGGAAGAATGGGGTGCCT

337/6881 FIGURE 314B

GGGGCCATAGACTAAGCGGGTGATGCCCCAGCGGATGTTGGCCACGGAGGAGCTGAGGCTCTCCCTTTCTCTGTG ATTGGACAGTTGACAGCACCCAAACTCTGGGGTGCATGTGTGGAAAGTTGTCAGACTTGAAAAGTGTTCCAAG TTCCCAGTCAGTCACAGAGACAGACTGCCTCTCGGTGGCAGTCTTGGTTAGCTATTTGCGCGCAAATGTTG TGATCCTGCCATTATAGATTTCTTGTTTCTGTTTTTAGTAATGTAGTGAGTAGCTCCAGGTGCCACATCTACTCA CAGATTTATCTAGTATTCTCAGATAGATGTTACAGGGCTTCTTATTCTTTGTAATGTACTCTTTTTAAATCCCTT CTTTCTAGTGACAAGGAATCTCTTCCAAGACTTTGTTTTTTGCACATTTGAAAATGCCACCCATGGATCAAAATAT TCCCTCAGCTGGAGTTATTGGAACCACTTTGTAGTCAAGACGAAAGCACTGAATTTTGCTTCAAAGAACTGTGTA TGTACAAGAGAAATCCTGCATAACCCCATTAGGAGTAGATGGTGCCCGGCCTATCTGTCAGGGAGGCAAAAAAGG CTTCATCCCATCCTTGCCAAAAAATAAGAAAACTGTCTTGGAGAATGGGTCAGAAGCCCCAAACGGCACACTT TCCAAATTAAAGTGGGCAGGGGCTGCTTTTAGCAGCTGCTGACCTGCAGATTTGTCAAAGCCAGTGACTAGAGAA GGAAGGGAGAAAGGCTGGCTGTTGGCTTGCTCTGAGCTGCAAGGATGGTCTCTAACTGATTAACTGTGAGCAGGT ACAGTGAGGGGTGGGAGGGGGTTTCCAGGGCCTGGTGTTGGAGAGTGCAGAGAAATATCTACCTCCTGGAGGT GTGAAGACTAGGTTTTTCTTCCTTCCAATTAGATTTTCCTTAATTATAGTGATGTCTTCCTTATTCATTTTT CTCTCCCTGCCTCTCACTGCCATAAGAATATCAGCCTGGGGGCAGTCCAGACGCAGCCCTTTGTCATCCTTTCTG TTTGCCTAGTCTCAGCAGACTGTGATCACAAGGCATTGTCTGTGGGATTTTTCCTTTCCCTTTCTTGATCTCTCT TGTGGTTCTAGGTTGTTTGTTCATTGTTATGGTGGCTTTTTATTTTAACGCCCCTTGAGCCCCATGATGGC TGGTGTCACCCTGTTCTTTTACACTGTTGGGCCAGGTGCTGCTTGTCCTTCTTAGGGCATCATCAATTGCAAATA TTTCCTTTTGCTCCCTTTATGAAGATGTTCTTATACCCTTGCTTTCCCATATTTTTCTGGCCAAGCATGCCATCT CCTTTACTCTGGGAACTTACATCCTGAATCCCAAGAGGGGGTCACAGTTTGGAAAAAGTCATCAGGGATTCTGGA ACTAAGTCTGATAAAAGATTCCAGTGAAGCCCTGTTCTGAGAACGAGCAGACTGCAGGGGAGGCCATGGGATTCC CCAGGCCAGTGTCTGTGCTGATCCTTCAAGGGTCTGCAGGTATGCAGGTGGCCTGGGCTGCTCGGCAGATACTTT TCCCCCAAGTATACCGTACCCTCCTGTGAGACAGTGTGTGCAGGCACCACCACCTTAATCCTGCTGTTGCCTGAC ATGCTGATTCTCATTTATTATGCTGCATCAACACATTAGAGGTACAGGAGCGGCTCAGTCATGAAAAAAGAAGGT CTTTTGCCCCATTTCTTTATTTCAGAGATGTGGGCTTTCAGTGGGAATTTGCTGACTCCTACTTTATAGGCTGAG GTAACTAAGATTTCAGTTTGAAATCTTAGATTTCAGTTCACGGCGATAAAGAAGTAGGTGCTGCACACAAATATG TAAAGCAATTGTAGGAAATTTGAAAGGAAAAAAAGAAACCGAAGCCAGTATTTTAATAATTGCTTTTTCTGTGTA TTTTGTATTGGGCTGGGGGATAGCATCAAAGGTTGAACTTTTTTGAGCTTTCTATGAAAAACCCCAGGACCTTCTT GCGCATTGTCTACTGGAGCTTTAGTCTTCTGAGACGGAGGAAAACTGCTGAATACTCTGGATTCATCTATGTCTA CAATGTTGCATTTATGAAAAACTACACTGTGCTAGGCGCATTCTAGGACATGAATATGACCACACCCTCTTTCAC AGATGGGGTAAGAAAACTACCCATGCATGATGTAGAGAGCTGTTGATTTGTTTCTGTTTTTTTAAAGGAAAACTA TTTGTAAGATGTTGCACTAAAACATTTTATATACACTTCAGAGACCTGTAGTAAATTATGTTGAAAAT

338/6881 FIGURE 315A

GCTCTTTGCCGAGGGCGTGTGGTGAGAGTCCCCACAGCGACCCTGGTTCGAGTGGTGGGCACTGAGCTGGTCATC CCCTGCAACGTCAGTGACTATGATGGCCCCAGCGAGCAAAACTTTGACTGGAGCTTCTCATCTTTGGGGAGCAGC TTTGTGGAGCTTGCAAGCACCTGGGAGGTGGGGTTCCCAGCCCAGCTGTACCAGGAGCGGCTGCAGAGGGGCCAG ATCCTGTTAAGGCGGACTGCCAACGACGCCGTGGAGCTCCACATAAAGAACGTCCAGCCTTCAGACCAAGGCCAC TACAAATGTTCAACCCCCAGCACAGATGCCACTGTCCAGGGAAACTATGAGGACACAGTGCAGGTTAAAGTGCTG GCCGACTCCCTGCACGTGGGCCCCAGCGCGCCCCCCCCGCGAGCCTGAGCCTGCGGGAGGGGGAGCCCTTCGAG GCCAGGCGGAGCGTCCTCGCCCTGACCCACGAGGGCAGGTTCCACCCGGGCCTGGGGTACGAGCAGCGCTACCAC CAGGGCTCCTACAGGTGTATCGTCAGCGAGTGGATCGCCGAGCAGCAACTGGCAGGAAATCCAAGAAAAGGCC GTGGAAGTTGCCACCGTGGTGATCCAGCCATCAGTTCTGCGAGCAGCTGTGCCCAAGAATGTGTCTGTGGCTGAA GGAAAGGAACTGGACCTGTAACATCACAACAGACCGAGCCGATGACGTCCGGCCCGAGGTGACGTGGTCC TTCAGCAGGATGCCTGACAGCACCCTACCTGGCTCCCGCGTGTTGGCGGGGCTTGACCGTGATTCCCTGGTGCAC AGCTCGCCTCATGTTGCTTTGAGTCATGTGGATGCACGCTCCTACCATTTACTGGTTCGGGATGTTAGCAAAGAA AACTCTGGCTACTATTACTGCCACGTGTCCCTGTGGGCACCCGGACACAACAGGAGCTGGCACAAAGTGGCAGAG GCCGIGTCTTCCCCAGCTGGTGTGGGTGTGACCTGGCTAGAACCAGACTACCAGGTGTACCTGAATGCTTCCAAG GTCCCCGGGTTTGCGGATGACCCCACAGAGCTGGCATGCCGGGTGGTGGACACGAAGAGTGGGGAGGCGAATGTC AAGGAACATACAGACACGTTCAATTTCCGGATCCAAAGGACTACAGAGGAAGACAGAGGCAATTATTACTGTGTT GTGTCTGCCTGGACCAAACAGCGGAACAACAGCTGGGTGAAAAGCAAGGATGTCTTCTCCAAGCCTGTTAACATA TTTGAGATGACTTGCAAAGTATCTTCCAAGAATATTAAGTCGCCACGCTACTCTGTTCTCATCATGGCTGAGAAG CCTGTCGGCGACCTCTCCAGTCCCAATGAAACGAAGTACATCATCTCTCTGGACCAGGATTCTGTGGTGAAGCTG GAGAATTGGACAGATGCATCACGGGTGGATGGCGTTGTTTTAGAAAAAGTGCAGGAGGATGAGTTCCGCTATCGA ATGTACCAGACTCAGGTCTCAGACGCAGGGCTGTACCGCTGCATGGTGACAGCCTGGTCTCCTGTCAGGGGCAGC CTTTGGCGAGAAGCAGCCAGTCTCCCAATCCTATTGAGATAGACTTCCAAACCTCAGGTCCTATATTTAAT GCTTCTGTGCATTCAGACACCATCAGTAATTCGGGGAGATCTGATCAAATTGTTCTGTATCATCACTGTCGAG GGAGCAGCACTGGATCCAGATGACATGGCCTTTGATGTCCTGGTTTGCGGTGCACTCTTTTGGCCTGGACAAG GCTCCTGTGCTCCTGTCTTCCCTGGATCGGAAGGGCATCGTGACCACCTCCCGGAGGGACTGGAAGAGCGACCTC AGCCTGGAGCGCGTGAGTGTGCTGGAATTCTTGCTGCAAGTGCATGGCTCCGAGGACCAGGACTTTGGCAACTAC TACTGTTCCGTGACTCCATGGGTGAAGTCACCAACAGGTTCCTGGCAGAAGGAGGCAGAGATCCACTCCAAGCCC GTTTTTATAACTGTGAAGATGGATGTGCTGAACGCCTTCAAGTATCCCTTGCTGATCGGCCTCGGTCTGTCCACG GTCATCGGGCTCCTGTCCTGTCTCATCGGGTACTGCAGCTCCCACTGGTGTTGTAAGAAGGAGGTTCAGGAGACA CGGCGCGAGCGCCGCAGGCTCATGTCGATGGAGATGGAC<u>TAG</u>GCTGGCCCGGGAGGGGAGTGACAGAGGGACGTT CTAGGAGCAATTGGGGCAAGAAGAGGACAGTGATATTTTAAAACAAAGTGTGTTACACTAAAAACCAGTCCTCTC TAATCTCAGGTGGGACTTGGCGCTCTCTTTTCTGCATGTCAAGTTCTGAGCGCGGACATGTTTACCAGCACAC GGCTCTTCTCCCACGCACTTTCTGATGTAACAATCGAGTGTGTTTTTCCCAACTGCAGCTTTTTAATGGTTA GACCTGTGCCGAAGGCTAATTTGTGGCTTTTACGACCCTACCCCACCCCTGTTTTCAGGGGTTTAGACTACATT CCCTTTTCCATTTCTTTTGTATTTGTTTTCTGTGAGAGCACTGAAATGGCAGCCCTGGAATCTACAATTTGGCTC GGGCAGTAAGAAGGGCTGCAAGGAAGGGAGGATGGGGACAAGGAAAGGATCAGATACCTGCTCCAGTAGTTGTG AGGCCACTGTGTCTCAGGGGACTCCAGGAGGAGCAGAAGAGGGATCCCACGAAGTTATTCTTACGCAGCTGGGGC

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GGGGGCAAAGGCATTGGTCACCAAGAGTCTTGCAGGGGGACCCACAGATATGCCATGTCCTTCACACGTGCTTGG CATGTTTTTCTATGACCTTTTCAGTCCTTCAGGTCATTTTAAGGTCCACTGCAGGGGGTTAGTGAGAAAGGGTA TACTTTGTGGTATGTTTTGCTTATAGGGACATGAAGGAAACCCAGCAATTTGCTGTTATGTGAATGGCCT GTAGAGCAGAGTCAAGAGCGGTGTGCTTTGCCCGACTGCTCCCATCAGGAATAGGAGAGTAGACAGAGATCTTCC ACATCCCAGGCTTCTGCTGCTGCTTTAAAAGCTCTGTCCTTGGAGCCTCCCGGAGCTCCCTGAAGTGTCTCGCCCCCT GCACAGCACTGGCCTTTCGGAAGCATCCCAGTAGGGTTTTCTGAGGCTCGCTGGTGACTCATGCCCTAATTGCAA TTTGAGCAATAAACTAATACAAAATGATGGCCATTCATGTGCAGCTCTTTGTCACCATGGGCCGGATGAGTTGTG CTCCTCCTGGCTCACCATTTCCCCCTGCTCCCCCACAGCCGGTTCTGCACTTATCACCGAGTCGCCCCTGGAAGC AGATTCCCATTGAGTTTTCCCCACCAAGGGGACCATGCACATGGTAGAAACATTAGATTCTGCATTGACAGTAGC CTTTCCTTGGCCCGGGCCTGTGGTGGGAAGACGGGCAACAAGTATACCCCACCAGGGCCTGAGTGACTAGAGGAA GAGGACGAGGCCTTGTTGGCACTAGATTTGGGTATTTTCTGCATGTCATAACATATCCTAACTGCTATTTCAGAA GAGGCAGCTTGTAGGTGATTGTACAAGTGAGAATTAAAGAGAGACAGATATTTAAACAGGTGCTGTATTAGTAA CAGCCAGTGCCCTTTCAGCCCTTGCATCTATTAAAAGGAGATTCAGGATTTTATTGGCACAGGCCCTTCTTAGTA TGGTGGTAAATGTGATGGGTGCTTACACACTGTACCTTTTCCTTTCATACTGATGCTGCAGTTCAGGGCTGGAGT TGTTAAGGCATTGACCTCCACCCACCTGCCCCATGTCCACTGGGCTGCCCAAGCTGCATGTCACCTGAGGGCTGG CAGGAAGGGGCGAGAAATCCCAGGGCATTGTACCAAGGACCTAGTTCCTTCTAGGGATATAAATTTCCAGGAATG TGTATTTTTAATGTGGTGAGATGCACTCTTTTGTTGTACCAAATAGGGCTCCCCACCCCACCCCTGCGACAAGTG TTTCACTTTGAAAAAAATGCAAATCGACTTTTTAACAACTGTTGAGATGTTTCATGGGACAGTAGAACTCTGAC TCTTGCTTTGCAGACTGCCTGCAGCCATGATTTTGTCACTGACATCTGTGAGCCAAAGACTGAGCCTTTTTGGCA AGAAGGGAACTGGGATTTGGGTAAGTTCTCCTCCACTGTTTGACCAAATTCTCAGTGATAAATATGTGTGCAGAT $\tt CCCTAGAAGAGAAAACGCTGACTTTCTTTTTAAGTGTGGCACATAAGGATCTGCAGAATTTTCCGTAGACAAAGA$ AAGGATCTTGTGTATTTTTGTCCATATCCAATGTTATATGAACTAATTGTATTGTTTTATACTGTGACCACAAAT ATTATGCAATGCACCATTTGTTTTTTTTTTTCATTAAAGGAAGTTTAATTT

340/6881 FIGURE 316

MPDSTLPGSRVLARLDRDSLVHSSPHVALSHVDARSYHLLVRDVSKENSGYYYCHVSLWAPGHNRSWHKVAEAVS SPAGVGVTWLEPDYQVYLNASKVPGFADDPTELACRVVDTKSGEANVRFTVSWYYRMNRRSDNVVTSELLAVMDG DWTLKYGERSKQRAQDGDFIFSKEHTDTFNFRIQRTTEEDRGNYYCVVSAWTKQRNNSWVKSKDVFSKPVNIFWA LEDSVLVVKARQPKPFFAAGNTFEMTCKVSSKNIKSPRYSVLIMAEKPVGDLSSPNETKYIISLDQDSVVKLENW TDASRVDGVVLEKVQEDEFRYRMYQTQVSDAGLYRCMVTAWSPVRGSLWREAATSLSNPIEIDFQTSGPIFNASV HSDTPSVIRGDLIKLFCIITVEGAALDPDDMAFDVSWFAVHSFGLDKAPVLLSSLDRKGIVTTSRRDWKSDLSLE RVSVLEFLLQVHGSEDQDFGNYYCSVTPWVKSPTGSWQKEAEIHSKPVFITVKMDVLNAFKYPLLIGVGLSTVIG LLSCLIGYCSSHWCCKKEVQETRRERRRLMSMEMD

341/6881 FIGURE 317

GCTGCCGCGTTAGTTCCGAGCTTGAAGTCACTAGGACTTCTCTCAAACTTGAGTGCTGAGGAGACTCAGATGTTG AGAAAGCAACACTTGTTATCTTGGGCTTGGCAGCAAGGAAGAGGACAGGTAGTGGAGATCCTGCAATCTGAAAAG CAGACTGAAAGGTGACAAAGAAGCTGAAGATGGGTGGTAGAGAGGGTATAACATTCCAGCCCCTCAATCTAGAA ATGTTAGTAAGAACCAACAACAGCTTAACAGACAGAAGACCAAGGAACAGAATTCCCAGATGAAGATTGTTCATA AGAAAAAGAAGAGGACATGGTTATAACTCATCAGCAGGTGCCTGGCAGGCCATGAAAAATGGGGGGAAGAACA AAAATTTTCCAAATAATCAAAGTTGGAATTCTAGCTTATCAGGTCCCAGCTTACTTTTTAAATCTCAAGCTAAAC AGAACTATGCTGGTGCCAAATTTAGTGAGCCGCCATCACCAAGTGTTCTTCCCAAACCACCAAGCCACTGGGTCC ATAAGACAAATGTTTAAGTTTAGTTCACAGATAGTTGTCAATTGGTCTGAAACAAATTTGCTAGGGAATC TATTTGTGTAGAACTAATTAATGTAAAAAAAATAGACTTCATCTCGTGTTGTGTGCACTGTGATATAATGGTAGT ATCAGTGCAACTTAAACTAATGATTGTAATTGATATTAAGTGTTCTCAACTGAGTAACTTTTAAGTGGAAACCAA CCAGTAGATTGTTGAAAGTTGGTGAATCGGATTATAAGCTTCTGGCTAACACAAGGATTCAGAATTAGGTAAACA TTTATAGAAACAGTATTTAATGGTCACTCAATAGCTTTCAAAATACATTTTTGTATTACAGCACTGCACAAGCTA CCTAGGGGAAAAGAGCCATGTAAATATCTGTAATAAACTTGTAGCATATGTAAAGTTTTCTTGGCCTTTATCTT ACAAAAATGGAATATTTTAGTATGAATTTGCTGAATGTAAGACCGTGGACTGTTTTTTATAATATGGCCTAATTT TGGTTGTAAACTATATTTCAAAGTAAACCCTAGTGTAATAAGTTTTATAACTAAAAAGGTTTAAGCTGCTAAAAC TATTTTTAAGAGATGTGAAATGCAGTATGGGACTATCTTTTTTTCCTCCTCTAAGCCCAAAGATTAACTAGAGTC CCTCCAACCTTATAGATTTTTGGCTTTCACAATCTTATAACCTAGGATACAGGTAGTTTCGAGTATGGTGCCAGT GATGTTTTGTTTTGGTCAAGGGGTAGGTGCAACCCAATGGACCACTTATGCAAAAGATGTAAACTCTTGC ATAATACATCGATAACATGTTTTGCCAACTTTAAATGCTTAAACATAAGCGAAACCAGTAGCAAGTATGTGGGTC AGTTTAAAAATTTTGATTGTTAATGCCCTATTTTCTAATTTGGCACCTCTTTTGATGCCTAAGCAGGTAAGCAGA TGCCTAAGCTGTATTTCTCCAAATAAATCAAGAGGAAGTACTGCCCAAGTTAAATATTGATAGCCTAAAGACAAA TTCATGTAGTACTTAATGTACATGATATGAATTTGAAGCATAAAATTAAATTTTTCCCCATTG

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TCCTCTATCGGGACCCCTCCCCATGTGGATCTGCCCAGGCGGCGGCGGCGGCGGCGGAGGAGGAGGAGGACCGAG TACTGCAAATGTCCAGAAGGCTTCTTGGGGGAATATTGTCAACATCGAGACCCCTGTGAGAAGAACCGCTGCCAG AATGGTGGGACTTGTGTGGCCCAGGCCATGCTGGGGAAAGCCACGTGCCGATGTGCCTCAGGGTTTACAGGAGAG TCTCATCCCTGTGCAAATGGAAGTACCTGTACCACTGTGGCCAACCAGTTCTCCTGCAAATGCCTCACAGGCTTC ACAGGGCAGAAATGTGAGACTGATGTCAATGAGTGTGACATTCCAGGACACTGCCAGCATGGTGGCACCTGCCTC AACCTGCCTGGTTCCTACCAGTGCCAGTGCCCTCAGGGCTTCACAGGCCAGTACTGTGACAGCCTGTATGTGCCC TGTGCACCCTCACCTTGTGTCAATGGAGGCACCTGTCGGCAGACTGGTGACTTCACTTTTGAGTGCAACTGCCTT CCAGGTTTTGAAGGGAGCACCTGTGAGAGGAATATTGATGACTGCCCTAACCACAGGTGTCAGAATGGAGGGGTT TGTGTGGATGGGGTCAACACTTACAACTGCCGCTGTCCCCCACAATGGACAGGACAGTTCTGCACAGAGGATGTG GATGAATGCCTGCTGCAGCCCAATGCCTGTCAAAATGGGGGCACCTGTGCCAACCGCAATGGAGGCTATGGCTGT GTATGTGTCAACGGCTGGAGTGGAGATGACTGCAGTGAGAACATTGATGATTGTGCCTTCGCCTCCTGTACTCCA GGCTCCACCTGCATCGACCGTGTGGCCTCCTTCTCTTGCATGTGCCCAGAGGGGAAGGCAGGTCTCCTGTGTCAT CTGGATGATGCATCAGCAATCCTTGCCACAAGGGGGCACTGTGTGACACCCAACCCCCTAAATGGGCAATAT ATTTGCACCTGCCCACAAGGCTACAAAGGGGCTGACTGCACAGAAGATGTGGATGAATGTGCCATGGCCAATAGC AATCCTTGTGAGCATGCAGGAAAATGTGTGAACACGGATGGCGCCTTCCACTGTGAGTGTCTGAAGGGTTATGCA GGACCTCGTTGTGAGATGGACATCAATGAGTGCCATTCAGACCCCTGCCAGAATGATGCTACCTGTCTGGATAAG AGCAACCCTTGTGTGAACAATGGGCAGTGTGTGGATAAAGTCAATCGTTTCCAGTGCCTGTGTCCTCCTGGTTTC ACTGGGCCAGTTTGCCAGATTGATATTGATGACTGTTCCAGTACTCCGTGTCTGAATGGGGCAAAGTGTATCGAT CACCCGAATGGCTATGAATGCCAGTGTGCCACAGGTTTCACTGGTGTTGTTGTGTGAGGAGAACATTGACAACTGT GACCCCGATCCTTGCCACCATGGTCAGTGTCAGGATGGTATTGATTCCTACACCTGCATCTGCAATCCCGGGTAC ATGGGCGCCATCTGCAGTGACCAGATTGATGAATGTTACAGCAGCCCTTGCCTGAACGATGGTCGCTGCATTGAC GCAAGTAACCCTTGTATCCATGGAATCTGTATGGATGGCATTAATCGCTACAGTTGTGTCTGCTCACCAGGATTC ACAGGGCAGAGATGTAACATTGACATTGATGAGTGTGCCTCCAATCCCTGTCGCAAGGGTGCAACATGTATCAAC GGTGTGAATGGTTTCCGCTGTATATGCCCCGAGGGACCCCATCACCCCAGCTGCTACTCACAGGTGAACGAATGC CTGAGCAATCCCTGCATCCATGGAAACTGTACTGGAGGTCTCAGTGGATATAAGTGTCTCTGTGATGCAGGCTGG GTTGGCATCAACTGTGAAGTGGACAAAAATGAATGCCTTTCGAATCCATGCCAGAATGGAGGAACTTGTGACAAT CTGGTGAATGGATACAGGTGTACTTGCAAGAAGGGCTTTAAAGGCTATAACTGCCAGGTGAATATTGATGAATGT GCCTCAAATCCATGCCTGAACCAAGGAACCTGCTTTGATGACATAAGTGGCTACACTTGCCACTGTGTGCTGCCA TACACAGGCAAGAATTGTCAGACAGTATTGGCTCCCTGTTCCCCAAACCCTTGTGAGAATGCTGCTGTTTGCAAA GACGAGTGTATCTCCAAGCCCTGCATGAACCATGGTCTCTGCCATAACACCCCAGGGCAGCTACATGTGTGAATGT CCACCAGGCTTCAGTGGTATGGACTGTGAGGAGGACATTGATGACTGCCTTGCCAATCCTTGCCAGAATGGAGGT ATGAATGAGTGTCTGAGTGAACCCTGTAAGAATGGAGGGACCTGCTCTGACTACGTCAACAGTTACACTTGCAAG TGCCAGGCAGGATTTGATGGAGTCCATTGTGAGAACACATCAATGAGTGCACTGAGAGCTCCTGTTTCAATGGT GGCACATGTGTTGATGGGATTAACTCCTTCTCTTGCTTGTGCCCTGTGGGTTTCACTGGATCCTTCTGCCTCCAT AGCTGCCCCTGGGCTACACTGGGAAAAACTGTCAGACCCTGGTGAATCTCTGCAGTCGGTCTCCATGTAAAAAC AAAGGTACTTGCGTTCAGAAAAAAGCAGAGTCCCAGTGCCTATGTCCATCTGGATGGGCTGGTGCCTATTGTGAC GTGCCCAATGTCTCTTGTGACATAGCAGCCTCCAGGAGAGGTGTGCTTGTTGAACACTTGTGCCAGCACTCAGGT

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GTCTGCATCAATGCTGGCAACACGCATTACTGTCAGTGCCCCCTGGGCTATACTGGGAGCTACTGTGAGGAGCAA CTCGATGAGTGTGCGTCCAACCCCTGCCAGCACGGGGCAACATGCAGTGACTTCATTGGTGGATACAGATGCGAG TGTGTCCCAGGCTATCAGGGTGTCAACTGTGAGTATGAAGTGGATGAGTGCCAGAATCAGCCCTGCCAGAATGGA GGCACCTGTATTGACCTTGTGAACCATTTCAAGTGCTCTTGCCCACCAGGCACTCGGGGCCTACTCTGTGAAGAG AACATTGATGACTGTGCCCGGGGTCCCCATTGCCTTAATGGTGGTCAGTGCATGGATAGGATTGGAGGCTACAGT TGTCGCTGCTTGCCTGGCTTTGCTGGGGAGCGTTGTGAGGGAGACATCAACGAGTGCCTCTCCAACCCCTGCAGC TCTGAGGGCAGCCTGGACTGTATACAGCTCACCAATGACTACCTGTGTTTTTGCCGTAGTGCCTTTACTGGCCGG ATGCCTGATGGTTTCATTTGCCGTTGTCCCCCGGGATTTTCCGGGGCAAGGTGCCAGAGCAGCTGTGGACAAGTG AAATGTAGGAAGGGGGAGCAGTGTGTGCACACCGCCTCTGGACCCCGCTGCTTCTGCCCCAGTCCCCGGGACTGC GAGTCAGGCTGTGCCAGTAGCCCCTGCCAGCACGGGGGCAGCTGCCACCCTCAGCGCCAGCCTCATTATTACTCC TGCCAGTGTGCCCCACCATTCTCGGGTAGCCGCTGTGAACTCTACACGGCACCCCCCAGCACCCCTCCTGCCACC TGGGATGGGGGTGACTGTTCTCTCACCATGGAGAACCCCTGGGCCAACTGCTCCCCCCACTTCCCTGCTGGGAT AGCAAGACATGCAAGTATGACAAATACTGTGCAGACCACTTCAAAGACAACCACTGTGACCAGGGGTGCAACAGT GAGGAGTGTGGTTGGGATGGGCTGGACTGTGCTGACCAACCTGAGAACCTGGCAGAAGGTACCCTGGTTATT GTGGTATTGATGCCACCTGAACAACTGCTCCAGGATGCTCGCAGCTTCTTGCGGGCACTGGGTACCCTGCTCCAC ACCAACCTGCGCATTAAGCGGGGACTCCCAGGGGGAACTCATGGTGTACCCCTATTATGGTGAGAAGTCAGCTGCT CTGGCCTCTCACGCCATACAGGGGACCCTGTCATACCCTCTTGTGTCTCGTCAGTGAATCCCTGACTCCAGAA $\tt CGCACTCAGCTCCTCTATCTCCTTGCTGTTGCTGTTGTCATCATCTGTTTATTATTCTGCTGGGGGTAATCATG$ AAGCGTCGTGAGCCAGTGGGACAGGATGCTGTGGGGCTGAAAAATCTCTCAGTGCAAGTCTCAGAAGCTAACCTA GCCTTACTCTCAGAAGAAGATGACCCCATTGATCGACGCCATGGACACAGCAGCACCTTGAAGCTGCAGACATC CGTAGGACACCATCGCTGGCTCTCACCCCTCCTCAGGCAGAGCAGGAGGTGGATGTGTTAGATGTGAATGTCCGT GGCCCAGATGGCTGCACCCCATTGATGTTGGCTTCTCCCGAGGAGGCAGCTCAGATTTGAGTGATGAAGATGAA CGGACTGGTGAGATGGCCCTGCACCTTGCAGCCCGCTACTCACGGGCTGATGCTGCCAAGCGTCTCCTGGATGCA GGTGCAGATGCCAATGCCCAGGACAACATGGGCCGCTGTCCACTCCATGCTGCAGTGGCAGCTGATGCCCAAGGT CTGGCTGCCCGCCTGGCTGTGGAGGGAATGGTGGCAGAACTGATCAACTGCCAAGCGGATGTGAATGCAGTGGAT GACCATGGAAAATCTGCTCTTCACTGGGCAGCTGCTGTCAATAATGTGGAGGCAACTCTTTTGTTGTTGAAAAAAT GGGGCCAACCGAGACATGCAGGACAACAAGGAAGAGACACCTCTGTTTCTTGCTGCCCGGGAGGGGGGGCTATGAA GCAGCCAAGATCCTGTTAGACCATTTTGCCAATCGAGACATCACAGACCATATGGATCGTCTTCCCCGGGATGTG GCTCGGGATCGCATGACCATGACATTGTGCGCCTTCTGGATGAATACAATGTGACCCCAAGCCCTCCAGGCACC GTGTTGACTTCTGCTCTCTCACCTGTCATCTGTGGGCCCAACAGATCTTTCCTCAGCCTGAAGCACACCCCAATG GGCAAGAAGTCTAGACGGCCCAGTGCCAAGAGTACCATGCCTACTAGCCTCCCTAACCTTGCCAAGGAGGCAAAG GATGCCAAGGGTAGTAGGAGGAAGAAGTCTCTGAGTGAGAAGGTCCAACTGTCTGAGAGTTCAGTAACTTTATCC CCTGTTGATTCCCTAGAATCTCCTCACACGTATGTTTCCGACACCACATCCTCTCCAATGATTACATCCCCTGGG ATCTTACAGGCCTCACCCAACCCTATGTTGGCCACTGCCGCCCCTCCTGCCCCAGTCCATGCCCAGCATGCACTA TCTTTTCTAACCTTCATGAAATGCAGCCTTTGGCACATGGGGCCAGCACTGTGCTTCCCTCAGTGAGCCAGTTG CCAGCAGATTGGATGAACCGCATGGAGGTGAATGAGACCCAGTACAATGAGATGTTTGGTATGGTCCTGGCTCCA GCTGAGGGCACCCATCCTGGCATAGCTCCCCAGAGCAGCCACCTGAAGGGAAGCACATAACCACCCCTCGGGAG CCCTTGCCCCCATTGTGACTTTCCAGCTCATCCCTAAAGGCAGTATTGCCCAACCAGCGGGGGCTCCCCAGCCT

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CAGTCCACCTGCCCTCCAGCTGTTGCGGGCCCCCTGCCCACCATGTACCAGATTCCAGAAATGGCCCGTTTGCCC AGTGTGGCTTTCCCCACTGCCATGATGCCCCAGCAGGACGGGCAGGTAGCTCAGACCATTCTCCCAGCCTATCAT CGAACACCCAGTCACAGTGGTCACCTCCAGGGTGAGCATCCCTACCTGACACCATCCCCAGAGTCTCCTGACCAG TGGTCAAGTTCATCACCCCACTCTGCTTCTGACTGGTCAGATGTGACCACCAGCCCTACCCCTGGGGGTGCTGGA GGAGGTCAGCGGGGACCTGGGACACATGTCTGAGCCACCACCACAACAACATGCAGGTTTATGCGTGAGAGAGT CCACCTCCAGTGTAGAGACATAACTGACTTTTGTAAATGCTGCTGAGGAACAAATGAAGGTCATCCGGGAGAGAA ATGAAGAAATCTCTGGAGCCAGCTTCTAGAGGTAGGAAAGAGAAGATGTTCTTATTCAGATAATGCAAGAGAAGC **AATTCGTCAGTTTCACTGGGTATCTGCAAGGCTTATTGATTATTCTAATCTAATAAGACAAGTTTGTGGAAATGC** GACATTCTTGCAGCTTGGACTGCATTTTAAGCCCTGCAGGCTTCTGCCATATCCATGAGAAGATTCTACACTAGC GTCCTGTTGGGAATTATGCCCTGGAATTCTGCCTGAATTGACCTACGCATCTCCTCCTCCTTGGACATTCTTTTG TCTTCATTTGGTGCTTTTGGTTTTGCACCTCTCCGTGATTGTAGCCCTACCAGCATGTTATAGGGCAAGACCTTT GTGCTTTTGATCATTCTGGCCCATGAAAGCAACTTTGGTCTCCTTTCCCCTCCTGTCTTCCCGGTATCCCTTGGA GTCTCACAAGGTTTACTTTGGTATGGTTCTCAGCACAAACCTTTCAAGTATGTTGTTTCTTTGGAAAATGGACAT GGGGGCAGGAGATCCCTTCAAGAGGCTGCACCTTAATTTTTCTTGTCTGTGTGCAGGTCTTCATATAAACTTTAC ${\tt CAGGAAGAAGGGTGTGAGTTTGTTTTTCTGTGTATGGGCCTGGTCAGTGTAAAGTTTTATCCTTGATAGTCT}$ AGTTACTATGACCCTCCCCACTTTTTTAAAACCAGAAAAAGGTTTGGAATGTTGGAATGACCAAGAGACAAGTTA ACTCGTGCAAGAGCCAGTTACCCACCCACAGGTCCCCCTACTTCCTGCCAAGCATTCCATTGACTGCCTGTATGG GTTGAGCCTTTCCTTTCATATCCACAGAAGACACTGTCTCAAATGTTGTACCCTTGCCATTTAGGACTGAACTTT CCTTAGCCCAAGGGACCCAGTGACAGTTGTCTTCCGTTTGTCAGATGATCAGTCTCTACTGATTATCTTGCTGCT TAAAGGCCTGCTCACCAATCTTTCTTTCACACCGTGTGGTCCGTGTTACTGGTATACCCAGTATGTTCTCACTGA AGACATGGACTTTATATGTTCAAGTGCAGGAATTGGAAAGTTGGACTTGTTTTCTATGATCCAAAACAGCCCTAT AAGAAGGTTGGAAAAGGAGGAACTATATAGCAGCCTTTGCTATTTTCTGCTACCATTTCTTTTCCTCTGAAGCGG CCATGACATTCCCTTTGGCAACTAACGTAGAAACTCAACAGAACATTTTCCTTTCCTAGAGTCACCTTTTAGATG ATAATGGACAACTATAGACTTGCTCATTGTTCAGACTGATTGCCCCTCACCTGAATCCACTCTGTATTCATGC TCTTGGCAATTTCTTTGACTTTCTTTTAAGGGCAGAAGCATTTTAGTTAATTGTAGATAAAGAATAGTTTTCTTC CTCTTCTCCTTGGGCCAGTTAATAATTGGTCCATGGCTACACTGCAACTTCCGTCCAGTGCTGTGATGCCCATGA CACCTGCAAAATAAGTTCTGCCTGGGCATTTTGTAGATATTAACAGGTGAATTCCCGACTCTTTTGGTTTGAATG CATATGGAAACCCTGCGTGTCTGTTGGCATAATAGTTTACAAATGGTTTTTTCAGTCCTATCCAAATTTATTGAA ${\tt CCAACAAAAATAATTACTTCTGCCCTGAGATAAGCAGATTAAGTTTGTTCATTCTCTGCTTTATTCTCTCCATGT}$ GGCAACATTCTGTCAGCCTCTTTCATAGTGTGCAAACATTTTATCATTCTAAATGGTGACTCTCTGCCCTTGGAC CCATTTATTATTCACAGATGGGGAGAACCTATCTGCATGGACCTCTGTGGACCACAGCGTACCTGCCCCTTTCTG CCCTCCTGCTCCAGCCCCACTTCTGAAAGTATCAGCTACTGATCCAGCCACTGGATATTTTATATCCTCCCTTTT CCTTAAGCACAATGTCAGACCAAATTGCTTGTTTCTTTTCTTGGACTACTTTAATTTGGATCCTTTGGGTTTGG AGAAAGGGAATGTGAAAGCTGTCATTACAGACAACAGGTTTCAGTGATGAGGAGGACAACACTGCCTTTCAAACT TTTTACTGATCTCTTAGATTTTAAGAACTCTTGAATTGTGTGGTATCTAATAAAAGGGAAGGTAAGATGGATAAT CACTTTCTCATTTGGGTTCTGAATTGGAGACTCAGTTTTTATGAGACACATCTTTTATGCCATGTATAGATCCTC GAAAGGTATGAGGGAAAGAGAGTCTGAGAATTAAAATATTTTAGTATAAGCAATTGGCTGTGATGCTCAAATCCA TTGCATCCTCTTATTGAATTTGCCAATTTGTAATTTTTGCATAATAAAGAACCAAAGGTGTAATGTTTTGTTGAG AGGTGGTTTAGGGATTTTGGCCCTAACCAATACATTGAATGTATGATGACTATTTGGGAGGACACATTTATGTAC CCAGAGGCCCCCACTAATAAGTGGTACTATGGTTACTTCCTTGTGTACATTTCTCTTAAAAGTGATATTATATCT GTTTGTATGAGAAACCCAGTAACCAATAAAATGACCGCATATTCCTGACTAAACGTAGTAAGGAAAATGCACACT

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346/6881 FIGURE 319

 ${\tt GAGGAGGAGGAGATGACTGGGGAGCTGGAGAATACTGCCCAGTTACTCTAGCGCGCCAGGCCGAAC}$ CGCAGCTTCTTGGCTTAGGTACTTCTACTCACAGCGGCCGATTCCGAGGCCAACTCCAGCAATGGCTTTTGCAAA TCTGCGGAAAGTGCTCATCAGTGACAGCCTGGACCCTTGCTGCCGGAAGATCTTGCAAGATGGAGGGCTGCAGGT GGTGGAAAAGCAGAACCTTAGCAAAGAGGAGCTGATAGCGGAGCTGCAGGACTGTGAAGGCCTTATTGTTCGCTC TGCCACCAAGGTGACCGCTGATGTCATCAACGCAGCTGAGAAACTCCAGGTGGTGGGCAGGGCTGGCACAGGTGT GGACAATGTGGATCTGGAGGCCGCAACAAGGAAGGGCATCTTGGTTATGAACACCCCCAATGGGAACAGCCTCAG TGCCGCAGAACTCACTTGTGGAATGATCATGTGCCTGGCCAGGCAGATTCCCCAGGCGACGGCTTCGATGAAGGA CGGCAAATGGGAGCGGAAGAAGTTCATGGGAACAGAGCTGAATGGAAAGACCCTGGGAATTCTTGGCCTGGGCAG GATTGGGAGAGAGGTAGCTACCCGGATGCAGTCCTTTGGGATGAAGACTATAGGGTATGACCCCATCATTTCCCC AGAGGTCTCGGCCTCCTTTGGTGTTCAGCAGCTGCCCCTGGAGGAGATCTGGCCTCTCTGTGATTTCATCACTGT GCACACTCCTCCTGCCCTCCACGACAGGCTTGCTGAATGACACACCTTTGCCCAGTGCAAGAAGGGGGTGCG TGTGGTGAACTGTGCCCGTGGAGGATCGTGGACGAAGGCGCCCTGCTCCGGGCCCTGCAGTCTGCCAGTGTGC CGGGGCTGCACTGGACGTGTTTACGGAAGAGCCGCCACGGGACCGGGCCTTGGTGGACCATGAGAATGTCATCAG CTGTCCCCACCTGGGTGCCAGCACCAAGGAGGCTCAGAGCCGCTGTGGGGAGGAAATTGCTGTTCAGTTCGTGGA CATGGTGAAGGGGAAATCTCTCACGGGGGTTGTGAATGCCCAGGCCCTTACCAGTGCCTTCTCTCCACACACCAA GCCTTGGATTGGTCTGGCAGAAGCTCTGGGGACACTGATGCGAGCCTGGGCTGGGTCCCCCAAAGGGACCATCCA GGTGATAACACAGGGAACATCCCTGAAGAATGCTGGGAACTGCCTAAGCCCCGCAGTCATTGTCGGCCTCCTGAA AGAGGCTTCCAAGCAGGCGGATGTGAACTTGGTGAACGCTAAGCTGCTGGTGAAAGAGGCTGGCCTCAATGTCAC CACCTCCCACAGCCCTGCTGCACCAGGGGAGCAAGGCTTCGGGGGAATGCCTCCTGGCCGTGGCCCTGGCAGGCGC ${\tt CCCTTACCAGGCTGTGGGCTTGGTCCAAGGCACTACGCCTGTACTGCAGGGGCTCAATGGAGCTGTCTTCAGGCC}$ AGAAGTGCCTCTCCGCAGGGACCTGCCCCTGCTCCTATTCCGGACCTCTGACCCTGCAATGCTGCCTAC ${\tt CATGATTGGCCTCCTGGCAGAGGCAGGCGTGCGGCTGCTGTCCTACCAGACTTCACTGGTGTCAGATGGGGAGAC}$ CTGGCACGTCATGGGCATCTCCTCCTTGCTGCCCAGCCTGGAAGCGTGGAAGCATGTGACTGAAGCCTTCCA ATAGGGAGAGAAAATCCACATTCTTGGGCTGAACGCGGGCCTCTGACACTGCTTACACTGCACTCTGACCCTGTA GTACAGCAATAACCGTCTAATAAAGAGCCTACCCCC

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MAFANLRKVLISDSLDPCCRKILQDGGLQVVEKQNLSKEELIAELQDCEGLIVRSATKVTADVINAAEKLQVVGR
AGTGVDNVDLEAATRKGILVMNTPNGNSLSAAELTCGMIMCLARQIPQATASMKDGKWERKKFMGTELNGKTLGI
LGLGRIGREVATRMQSFGMKTIGYDPIISPEVSASFGVQQLPLEEIWPLCDFITVHTPLLPSTTGLLNDNTFAQC
KKGVRVVNCARGGIVDEGALLRALQSGQCAGAALDVFTEEPPRDRALVDHENVISCPHLGASTKEAQSRCGEEIA
VQFVDMVKGKSLTGVVNAQALTSAFSPHTKPWIGLAEALGTLMRAWAGSPKGTIQVITQGTSLKNAGNCLSPAVI
VGLLKEASKQADVNLVNAKLLVKEAGLNVTTSHSPAAPGEQGFGECLLAVALAGAPYQAVGLVQGTTPVLQGLNG
AVFRPEVPLRRDLPLLLFRTQTSDPAMLPTMIGLLAEAGVRLLSYQTSLVSDGETWHVMGISSLLPSLEAWKQHV
TEAFQFHF

348/6881 FIGURE 321

 $\tt GGGCGCGGGCTGGGCTTCCCACGGCACGACATGGAGACCTGTGGTTGCGAGGCTCCCTGGGGCTCGGCTT$ CTCCCTGCCCGGCCGCATCGCTGCCAAGCTCGCCTTCCTGCCGCGGAGGCCACCTACTCCCTGGTGCCTGAGC $\verb|CCGAGCTGGGGCCTGGGGGCCCCCCTTGGGGACCCTGAGAGCCTCCTCGGGCGCACCCGGGCGCT|\\$ TCTCGCACGGCAATGCCGTGGACCTGGGCCAGATGAGCAGCTTCTACATTGGCCTGGGCTCCCGCCTCCACTGCA ACATCTTCACCTACGACTCCTCCGGCTACGGTGCCAGCTCGGGCAGGCCTTCCGAGAGGAACCTCTATGCCGACA TCGACGCCACCTGGCAGGCCCTGCGCACCAGGTACGGCATCAGCCCGGACAGCATCATCCTGTACGGGCAGAGCA TCGGCACGGTGCCCACCATGGACCTGGCCTCGCGCTACGAGTGTGCCGCGGTGGTGCTGCACTCGCCGCTCACCT CGGGCATGCGCGTCGCCTTCCGCGACACCAAGAAGACCTACTGCTTCGACGCCTTCCCTAACATCGAGAAGGTGT $\tt CCCCCGGGCCCAGGGGACCCCGACCCAGGGGCTGTGGACGATGTACAGGCAACAGAGCTACGCACT$ CCTTTCCTTTTGGAAGCAAGAAGAAAATACGTGAAAACGGAAATTAAAGATTTAAAATT

349/6881 FIGURE 322

MNGLSLSELCCLFCCPPCPGRIAAKLAFLPPEATYSLVPEPELGPGGAGAAPLGTLRASSGAPGRWKLHLTERAD FQYSQRELDTIEVFPTKSARGNRVSCMYVRCVPGARYTVLFSHGNAVDLGQMSSFYIGLGSRLHCNIFTYDSSGY GASSGRPSERNLYADIDATWQALRTRYGISPDSIILYGQSIGTVPTMDLASRYECAAVVLHSPLTSGMRVAFRDT KKTYCFDAFPNIEKVSKITSPVLIIHGREDEVIDFSHGLALYERCPKAVEPLWVEGAGHNDIELYSQYLERLRRF ISQELPSQRA

350/6881 FIGURE 323A

AGCGTGAACCTGGGAGGCAGAGCTTGCAGTGAGCCTAGATCGCGTCACTCCAGCCTGGGAGACAGAGTGA CATGACTACCATTAAGAAAATATAACCTGTTGGGAAACTGTTTCTGCCTTGATGATGTTGTACAGACAAGAGATA AACAGTGAGGAATGTGCTTAGATGTATTGGGAAAGACACGGGTCTGTGGCATTGTCACAAGGGTACACGAATACT GAGAGTGAATGCTGAAGGAATGATCCCCATTGGTGGTGACCCTCAGGTGAGACTAGGGTGCCTGTGTTTCAGCAA AGCCTGGGCAATTGGAATGCAGGGCTCCTAAGATTCCATGACACCCCCACCTTCTAATTCTGTTATTGCAACTGC AGACCGTTACCTGGCACGCTGGCCACAATCTACCTCACTCTTATCAGAGTCTGAGCTACTGGCAGTGCTTTCAGC $. \\ \texttt{TCTGAGTTGAGGCACCTCGAACCTTGTTTTTGTGGTGAAGGATCCTAAAGTGCTGTGGGAGTGATCACATTTTTC}$ ACAACAGTAAGTCCCTGACTCCACCTCTTCTGCCACAAACGTCAGCATGGTGGTATCAGCCGGCCCTTGGTCCAG CGAGAAGGCAGAGATGAACATTCTAGAAATCAACGAGAAATTGCGCCCCCAGTTGGCAGAGAACAACAGCAGTT CGTAAACCTCAAAGAGATGTTTTCTAACTCAACTGGCCGGCTTCCTGGCCAACCGACAGAAGAAATACAGCAATA TAAAGTCCTGGTTCACTCTCAGGAACGAGAGCTGACGCAGTTAAAGGAGAAGTTACAGGAAGGGAGAGATGCCTC CCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCTGGATGAGCCGGACAAGTCCCAGGGGCAGGACCTCCA AGAACAGCTGGCTGAGGGGTGTAGACTGGCACAGCACCTTGTCCAAAAGCTCAGCCCAGAAAATGACGAAGATGA GGATGAAGATGTTCAAGTTGAGGAGGATGAGAAAGTGCAGAAATCATCTGCCCCCAGGGAGGTGCAGAAGGCTGA AGTGAGCAAAGTCCCTGAGGACTCACTGGAGGAATGTGCCATCACTTGTTCAAATAGCCACGGCCCTTGTGACTC CAACCAGCCTCACAAGAACATCAAAATCACATTTGAGGAAGACGAAGTCAACTCAACTCTGGTTGTAGACAGAGA ATCCTCTCATGATGAATGTCAGGATGCTCTAAACATTCTCCCAGTCCCTGGCCCCACCTCTTCTGCCACAAACGT CAGCATGGTGGTATCAGCCGGCCCTTTGTCCAGCGAGAAGGCAGAGATGAACATTCTAGAAATCAATGAGAAATT GCACCCCAGCTGGCAGAAAAAACAGCAGTTCAGAAACCTCAAAGAGAAATGTTTTCTAACTCAACTGGCCGG CTTCCTGGCCAACCAGCAGAACAAATACAAGTATGAAGAGTGTAAAAGACCTCATAAAATTTATGCTGAGGAATGA TCACGCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTGCGGGAAGGGAGAGATGCCTCCCGCTCATTGAA TGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGGACAAGTCCCAGGGGCAGGACCTCCAAGAACAGCTGGC TGAGGGGTGTAGACTGGCACAGCACCTTGTCCAAAAGCTCAGCCCAGAAAATGACAACGATGACAATGAAGATGT TCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTGCCCCCAGGGAGATGCAGAAGGCTGAAGAAAAGGAAGT CCCTGAGGACTCACTGGAGGAATGTGCCATCACTTATTCAAATAGCCATGGCCCTTATGACTCCAACCAGCCACA TAGGAAAACCAAAATCACATTTGAGGAAGACAAAGTCGACTCAACTCTCATTGGCTCATCCTCTCATGTTGAACG GGAAGATGCTGTACACATTATTCCAGAAAATGAAAGTGATGATGAGGGAAGAAGAAGAAAAAGGGCCAGTGTCTCC CAGGAATCTGCAGGAGTCTGAAGAGGGGGAAGTCCCCCAGGAGTCCTGGGATGAAGGTTATTCGACTCCCTCAAT TCCTCCTGAAATGTTGGCCTCGTACAAGTCTTACAGCAGCACATTTCACTCATTAGAGGAACAGCAAGTCTGCAT GGCTGTTGACATAGGCAGACATCGGTGGGATCAAGTGAAAAAGGAGGACCAAGAGGCAACAGGTCCCAGGCTCAG CAGGGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACTCACTGTATAGATGTTATTCAACTCCTTCAGG TTGTCTTGAACTGACTCATGCCAGCCCTACAGAAGTGCCTTTTACGTATTGGAGCAACAGCGTGTTGGCTT GGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCAAGACCCATCATGCCCCAGGCTCAG CAGGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGGTAGATGGTATTCGACTCCTTCAGG TTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTGTTTACTCATTGGAGGAACAGTACCTTGGCTT GGCTCTTGACTTGGACAGAATTAAAAAGGACCAAGAAGAAGAAGAAGACCAAGGCCCACCATGCCCCAGGCTCAG CAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCAACTCCTTCCAG TTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCTTTTATGCATTGGAGGAAAAACATGTTGGCTT AAGAAGGGGAAGAAAAGAAGGGGAAGAAGATCAAAACCCACCATGCCCCAGGCTCAACGGCGTGCTGATGGAAGT GGAAGAGCCTGAAGTCTTGCAGGACTCACTGGATGGATGTTATTCTACTCCGTCAATGTACTTGAACTACCTGA CTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAACAGCACATCAGCTTCGCCCTTTACGTGGACAA TAGGTTTTTTACTTTGACGGTGACAAGTCTCCACCTGGTGTTCCAGATGGAAGTCATATTCCCACAATAAGCAGC CCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGCCTATTCCTATTCTCAAACCATGCCAGTGGCAA ${\tt CCTGTGCTCAGTCTGAAGACAATGGACCCACGTTAGGTGTGACACGTTCACATAACTGTGCAGCACATGCCGGGA}$

351/6881 FIGURE 323B

GTGATCAGTCAGACATTTTAATTTGAACCACGTATCTCTGGGTAGCTACAAAATTCCTCAGGGATTTCATTTTGC AGACATGTCTCTGAGCTTCTATACCTGCTCAAGGTCATTGTCATCTTTGTGTTTAGCTCATCCAAAGGTGTTACC CTGGTTTCAATGAACCTAACCTCATTCTTCGTGTCTTCAGTGTTGGCTTGTTTTAGCTGATCCATCTGTAACACA GGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGACAATTGTTAACCCGCTAGGCTCCT TTGGTTAGAGAAGCCACAGTCCTTCAGCCTCCAATTGGTGTCAGTACTTAGGAAGACCACAGCTAGATGGACAAA CAGCATTGGGAGGCCTTAGCCCTGCTCCTCTCAATTCCATCCTGTAGAGAACAGGAGTCAGGAGCCGCTGGCAGG AGACAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAACAATGCCATGTTCTTGCAGAAAACGCTTAGCCT GAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACTGAGCAGGACAACTGACCTGTCTCCTTC TGACATGGACTTGTTTATAGAGGACAGGTCAGCTGTCTGGCTCAATGATCTACATTCTGAAGTTGTCTGAAAATG TCTTCATGATTAAATTCAGCCTAAACGTTTTGCCGGGAACACTGCAGAGACAATGCTGTGAGTTTCCAACCTCAG ${\tt CCCATCTGCGGGCAGAGAGGTCTAGTTTGTCCATCACCATTATGATATCAGGACTGGTTACTTGGTTAAGGAGG}$ GGTCTAGGAGATCTGTCCCTTTTAGAGACACCTTACTTATAATGAAGTACTTGGGAAAGCGGTTTTCAAGAGTAT ATATTCATATCTCTACGCTGCAAATTTTGGGTCTCAATTTTTACTGTGCCTTTGTTTTTACTAGTGTCTGCTGTT GCAAAAAGAAGAAAACATTCTCTGCCTGAGTTTTAATTTTTGTCCAAAGTTAATTTTAATCTATACAATTAAAAC CTTTTGCCTATCACTCTGGACTTTTGGATTGTTTTTTACATTCAGTGTTATAATATTTGATTATGCTGATTGGTT TTGGTGGGTACTGATGCGAATTAATAAAAACATTTCATTTCC

352/6881 FIGURE 324A

GTTTTGTAACTCAACTGGCCGGCTTCCTGGCCAAGCAGCAGCAGAACAAATACAAATATGAAGAGTGCAAAGACCTCA TCAGGTGAGGGACCCCATGGGGGCAGGCAGGGGGGCAGGTGTGTAAATCTCTGAAGTACAACAGCTCGGTGGGG AGACTTAAGAGCTAAGCTGGGCCAGGGGAAGGGCAGGAATTGCCATGGCAGGCTCGCTACACACAAATATTTATC AAACAGAGAAGAAGGATAATAAAAATTTATGGGTTGCAGTGTTTCTCAGAGCCTGTTTTCTTTTTTCAAACAAGT AATGTTGATGTGAAATTTACATAACACAAAATTAACCAAAGGAGTGTGAACCACACAGCAGCATTCAGTATACTC TGGCCTCATTTCTGTACATGGCTTTGTATCTAATGGCCGCAAGATGCACTATGTGTATTTTCACATGGAAATGTC CATGGCCAGAGTGAGGAACTGAAAGGATGTCTTTTTGAAACGGAATTAGGAAGACACCTACTTTTGTTTACAGAG GGGAAAGATGAATGGAACATCATCGAGGATCTTGCAGGAGCCCTCTCTGATACAGAGGAAGCCTGTAAACCATTT TTGTCTCAGAAATCTCTGTTGCAATATTTGAACGGATCACTCAACCCTTTCCACTCTTAAATTTTCTCTACCGTC TCACCTTAGGCAATATAAAGTCCTGGTTCACTCTCAGGAACGAGAGCTGACCCAGTTAAGGGAGAAGTTACGGGA AGGGAGAGATGCCTCCCGCTCATTGAATGAGCATCTCCAGGCCCTCCTCACTCCGGATGAGCCGGACAAGTCCCA GGGGCAGGACCTCCAAGAACAGCTGGCTGAGGGGTGTAGACTGGCACAACACCTTGTCCAAAAGCTCAGCCCAGA AAATGATAACGATGACGATGAAGATGTTCAAGTTGAGGTGGCTGAGAAAGTGCAGAAATCGTCTTCCCCCAGGGA GATGCAGAAGGCTGAAGAAAAGGAAGTCCCTGAGGACTCACTGGAGGAGTGTGCCATCACTTGTTCAAATAGCCA TGGCCCTTATGACTCCAACCAGCCACATAGGAAAACCAAAATCACATTTGAGGAAGACAAAGTCGACTCAACTCT CATTGGCTCATCCTCATGTTGAATGGGAGGATGCTGTACACATTATCCCAGAAAATGAAAGTGATGATGAGGA AGAGGAAGAAAAAGGGCCAGTGTCTCCCAGGAATCTGCAGGAGTCTGAAGAGGAGGAAGTCCCCCAGGAGTCCTG GGATGAAGGTTATTCGACTCTCTCAATTCCTCCTGAAAGGTTGGCCTCATACCAGTCTTACAGCAGCACATTTCA CTCATTAGAGGAACAGCAAGTCTGCATGGCTGTTGACATAGGCAGACATCGGTGGGATCAAGTGAAAAAAGGAGGA CGTATTGGAGCAACAGCGTGTTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGA GGATAGATGTTATTCGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGAAGTGCTGTTTA CTCATTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAGGAAGAAGAAGA CCAAGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACTCACT GGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTACAGAAGTTCCTTTTA TGCATTGGAGGAAAAACATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGGGAAGGGGAAGAAAAG AAGGGGAAGAAGATCAAAGAAGAAAAAGAAGAAGGGGGAAGAAAGGAGGGGAAGAAGATCAAAACCCACCATGCCC CAGGCTCAACAGCGTGCTGATGGAAGTGGAAGAGCCTGAAGTCTTGCAGGACTCACTGGATAGATGTTATTCGAC TCCATCAATGTACTTTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAACAGCA CATCACCTTTGCCCTTGACATGGACAATAGCTTTTTTACTTTGACGGTGACAAGTCTCCACCTGGTCTTCCAGAT CCTGAAGATTTGAATGAAACTATAGTTCCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGGCTCTATT CCTATTCTCAGAGCATGCCAGTGGCAACCTGTGCTCAGTCTGAAGACAATGGACCCACGTTAGGTGTGACACGTT CACATAACTGTGCAGCACATGCCGGGAGTGATCAGCCGGACATTTTAATTTGAACCATGTATCTCTGGGTAGCTA CAAAATTCCTCAGGGATTTCATTTTGCAGGCATGTCTCTGAGCTTCTATACCTACTCAAGGTCAGTGTCATCTTT GTGTTTAGTTCATCCAAAGGTGTTACCCTGGTTTCAATGAACCTAACCTCATTATTTGTGTCTTCAGTGTTGGCT TGTTTTAGCTGATCCATCTGTAACACAGGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCT TGACAATTGTTAACCCGCTAGGCTCCTTTGGTTAGAGAAGCCACAGTCCTTCAGCCTCCAATTGGTGTCAGTACT TAGGAAGACCACAGCTAGATGGACAAACAGCATTGGGAGGCCTTAGCCCTGCTCCTCTCAATTCCATCCTGTAGA GAACAGGAGTCAGGAGCCGCTGGCAGGAGACAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAGCAATGC CATGTTCTTGCAGAAAACGCTTAGCCTGAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACT GAGCAGGACAACTGACCTGTCTCCTTCACATAGTCCATATCACCACAAATCACACAACAAAAAGGAGAAGAGATA

353/6881 FIGURE 324B

354/6881 FIGURE 325

MLRNELQFKEEKLAEQLKQAEELRQYKVLVHSQERELTQLREKLREGRDASRSLNEHLQALLTPDEPDKSQGQDL QEQLAEGCRLAQHLVQKLSPENDNDDDEDVQVEVAEKVQKSSSPREMQKAEEKEVPEDSLEECAITCSNSHGPYD SNQPHRKTKITFEEDKVDSTLIGSSSHVEWEDAVHIIPENESDDEEEEEKGPVSPRNLQESEEEEVPQESWDEGY STLSIPPERTSVGSSEKGGPRGNRSQAQQGAAG

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CTCCGCGGTCTTCTGAGCGGTCACGTGAACGGCTTCCTGCAGGCTGGCCATGGCGCTTCAAGTTCCCAAGGCTCC GGGCTTCGCCCAGATGCTCAAGGAGGGAGCGAAACACTTTTCAGAATTAGAAGAGGCTGTGTATAGAAACATACA AGCTTGCAAGGAGCTTGCCCAAACCACTCGTACAGCATATGGACGAAATGGAATGAAAAAAATGGTTATCAACTA CTTGGAGAAGTTGTTTGTGACAAATGATGCAGCGACTATTTTAAGAGAACTAGAAGTACAGCATCCTGCTAAA AATGACTGTAATGGCTTCTCATATGCAAGAGCAAGAAGTTGGAAGATGGCACAAACATTGTTCTGGTATTTGCTGG AGCTCTCCTGGAATTAGCTGAAGAACTTCTGAGGATTGGCCTGTCAGTTTCAGAGGTCATAGAAGGTTATGAAAT AGCTTGCAGAAAAGCTCATGAGATTCTTCCTAATTTGGTACGTTGTTCTGCAAAAAAACCTTCGAGATGTTGATGA AGTCTCATCTCTACTTCGTACCTCTGTAATGTGTAAACAATATGGTAATGAAGTATTTCTGGCCAAGCTTATTGT TCAGGCATGCGTATCTATTTTCCTGATTCTGGCCATTTCAAAGTTGATAACATCAGAGTTTGTAAAATTCTGGG CTGTGGTATCACTTCCTCTTCAGTATTGCATGGCATGGTTTTTAAGAAGGAAACAGAAGGTGATGTACATCTGTC AAAGATGCAAAAATAGCAGTGTACTCTTGTCCTTTTGATGGCATGATAACAGAAACTAAGGGAACAGTGTTGATA AAGACTGATGAAGAATTGATGAATTTAAGTAAGGGAGAAGAAAATCTCATGGATGCATAAGTCAAAGCTATTGCT ATGATGTTAGTGAAGCTAAACTCAAAATGGGATGTCTGAAGACTCTGTAAAACAGTTGGTGCTACAGCTCTTCCT AGATTGACACCTCCTGTCCTTGAAGAAATGGGACACTGAGACAGTGTTTACCTCTCAGAAGTTGGAGATACTCAG GTGGTGGTTTTTAAGCATGAAAAGGAAGATGGCATCATTTCTACCATAGTACTTCAGGGCTCTACAGACAATCTG ATGGATGACATAGAAAGGGCAGTAGATGATGGTGTTAATACTTTCAAAGTTCTTACAAGGGATAAACGTCTTGTA CCCGGAGGTGGAGCAACAGAAATTGAATTAGCCAAACAGATCACATCATATGGAGAGACATGTCCTGGACTTGAA CAGTACGCTATTAAGAAGTTTGCTGAGGCGTTTGAAGCTATTCCCCGTGCACTGGCAGAAATACTCTGGAGAAAA CTCTGGAGTTAAGGCCAATGAAGTAATCTCTAAACTTTATGCAGTACCTCAAGAAGGAAATAAAATGTTGGATT AGATACTGAGGCTGTAGTCCCTGCTGTAACGGACATGTTGGAAGCTGGTGTTCTAGATACTTACCTGGGAAAACA CTGGTCTATCAAACTCGCTGCTAATGCTGCAGTCACTGTACTTAGAGTGGGTCAGGTAATCATGGCAAAACCAGA TGGTGGGCCCAAGCCTCCAAGTGGGAAGAAGACTGGGATGATGACCAAAATGATTGAAATTGGCTTAATTTTTA CTGTAGGTGAAGGCTGTATTTGTAGTAGTATTCTAAGAATCGCGTGATGTTTTCTTATTCTCCTTACATTAAGAG GTATTTTGTGTTTGTATTCTTGGCTGGATGTTATAATAAACATATTGTTACTGTC

357/6881 FIGURE 328

GTGGGTAGGAGCTTGCTTATAGAAAAGTGGAATCGAGTAGTCCTTGCTGGTGGAGCCGCTGCCGCCAGGGAACTC AGGGCCGGCTCCTGTTCCTTCAAGAGTGCTGGAGGCCAAACTTGAAATACAAGTTTAATGTTCCTCGTCGGGCAA AAGATAAGGATCCGATCTCCCCCGGCCCGGTGTGCAGCAGGAGCGACCAACCCCGACCCGGGTTAAAACTCCCAG GGACTCTTCGCTGCCACCTCTTGTTCTCTCCCCCGTTCCCACTCGGGGTCTCCCTCAGGGCCGGGAGGCACA GCGGTCCCTGCTTGCTGAGGGGCTGGATGTACGCATCCGCAGGTTCCCGCGGACTTGGGGGCGCCCGCTGAGCCC CGGGTGGCCCTGGCCGAGCTGCAGGAGGCCGATGGCCAGTGTCCGGTCGACCGCAGCCTGCTGAAGTTGAAAATG GTGCAGGTCGTGTTTCGACACGGGGCTCGGAGTCCTCTCAAGCCGCTCCCGCTGGAGGAGCAGGTAGAGTGGAAC CCCCAGCTATTAGAGGTCCCACCCCAAACTCAGTTTGATTACACAGTCACCAATCTAGCTGGTGGTCCGAAACCA TATTCTCCTTACGACTCTCAATACCATGAGACCACCCTGAAGGGGGGGCATGTTTGCTGGGCAGCTGACCAAGGTG ACCTTCAACCCACAGGAGGTCTTTATTCGTTCCACTAACATTTTTCGGAATCTGGAGTCCACCCGTTGTTTGCTG GCTGGGCTTTTCCAGTGTCAGAAAGAAGGACCCATCATCATCCACACTGATGAAGCAGATTCAGAAGTCTTGTAT CCCAACTACCAAAGCTGCTGGAGCCTGAGGCAGAGAACCAGAGGCCGGAGGCAGACTGCCTCTTTACAGCCAGGA ATCTCAGAGGATTTGAAAAAGGTGAAGGACAGGATGGGCATTGACAGTAGTGATAAAGTGGACTTCTTCATCCTC CTGGACAACGTGGCTGCCGAGCAGGCACACACCTCCCAAGCTGCCCCATGCTGAAGAGATTTTGCACGGATGATC GAACAGAGAGCTGTGGACACATCCTTGTACATACTGCCCAAGGAAGACAGGGAAAGTCTTCAGATGGCAGTAGGC CCATTCCTCCACATCCTAGAGAGCAACCTGCTGAAAGCCATGGACTCTGCCACTGCCCCCGACAAGATCAGAAAG CTGTATCTCTATGCGGCTCATGATGTGACCTTCATACCGCTCTTAATGACCCTGGGGATTTTTGACCACAAATGG CCACCGTTTGCTGTTGACCTGACCATGGAACTTTACCAGCACCTGGAATCTAAGGAGTGGTTTGTGCAGCTCTAT TACCACGGGAAGGAGCAGGTGCCGAGAGGTTGCCCTGATGGGCTCTGCCCGCTGGACATGTTCTTGAATGCCATG TCAGTTTATACCTTAAGCCCAGAAAAATACCATGCACTCTGCTCTCAAACTCAGGTGATGGAAGTTGGAAATGAA ΑΑΑΑΑΑΑΑΑΑ

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MITGVFSMRLWTPVGVLTSLAYCLHQRRVALAELQEADGQCPVDRSLLKLKMVQVVFRHGARSPLKPLPLEEQVE WNPQLLEVPPQTQFDYTVTNLAGGPKPYSPYDSQYHETTLKGGMFAGQLTKVGMQQMFALGERLRKNYVEDIPFL SPTFNPQEVFIRSTNIFRNLESTRCLLAGLFQCQKEGPIIIHTDEADSEVLYPNYQSCWSLRQRTRGRRQTASLQ PGISEDLKKVKDRMGIDSSDKVDFFILLDNVAAEQAHNLPSCPMLKRFARMIEQRAVDTSLYILPKEDRESLQMA VGPFLHILESNLLKAMDSATAPDKIRKLYLYAAHDVTFIPLLMTLGIFDHKWPPFAVDLTMELYQHLESKEWFVQ LYYHGKEQVPRGCPDGLCPLDMFLNAMSVYTLSPEKYHALCSQTQVMEVGNEE

359/6881 FIGURE 330

360/6881 FIGURE 331

TGACTTGCTCACTATCATGAACTCAAAAGAAACTAGCAATTTTTTAGACTTCTTTTGGGATCCTTGTACCGCATC
CTATACTGCTTTTATGTTCATGTGTGCATTTGTGTACATGTATACACATATTACTCCATAACGAAGCACAGTCTT
CTTTTATACCTTTCCTGGTTGGGGTAGTAGAGGAATTTTACAGCCTACAATCAGACACACTCCAGAAGAAGAAGAGGG
AATATGTATGATACCTTAAAAATCAGCACATTTAACAAAGTATAACTTACTCATGGTTACAACTAAGTTAATGTT
TTTTCCCTTTATTTTTCAAAAGGCTCATTTTTCTCCATTTCTCACTATCAAAGTCAAGAACTGCCCAATGGCTC
TGTCAAGGAGGCTCCAGCTCCTACTCCCACTTCTTGGAAGTCCACCAGATACTACAGAGGAAGAAGA
TCATAAGCCTAAACTCTGCAGGCTGGCTAAAGGTGAAAAATGGCTATGGCTTTCACTTAAATGCGATTCGGGGTCT
GCCAGGCTCATTCATCAAAGAGGGTACAGAAGGGCGGTCCTGCTGACTTGGCTGGGCTAGAGGATGAGGATGACTCAT
CATTGAAGTGAATGGGGTGAATGTGCTAGATGAACCCTATGAGAAGGTGGTGGATAGAAAATCCCTATTGTTTCCTC
CCTGGCTGATCCACTTCTAGTCTGTGGAAGAAGAGCCTATGATTATTTCCAAGCTAAGAAAATCCCTATTGTTTCCTC
CCTGGCTGATCCACTTGACACCCCTCCAGATTCTAAAGAAGGAATAGTGGTGGAGTCAAAGCATGACTCGCACAT
GGCAAAAGAACGGGCCCCACAGTACAGCCTCACATTCTTCTCCAATTCTGAAGATACAGAGATGTGATGAAAACA
AGCGGCTATTGCAGACGCCTAATTTATGCTTAACTTAGGAAGAGATAAGGCTCCTTTGAGCACCAAAGATGATTCA
TAACTCTGTATAGGTGACAGCTGCTTATAAAAAGCATCTTAGCAGATAAGCCTTATTAAAATTGTGCTTTTTTTAACAA

GTCCCAACTCTTGGACTCCATTTGCTATTCTCTTCTTCTCCCCCACACCTATCTGGTGGTGGTAGTGGGCGTTT ATATTTGCGTTCCTTTCATTCATTCTAAAATCTCTTAAAAATTTTGGGTTGGGGGTATTGGGGAAGGCAGGAAA ${\tt GGGAAAAGGAGAGTAGTAGCTGAAGAGCAAGAGGAGGACGAC} {\tt ATG} {\tt GAGATGAAGAAGAAGATTAACCTGGAGTTAAGG}$ AACAGATCCCCGGAGGAGGTGACAGAGTTAGTCCTTGATAATTGCCTGTGTGTCAATGGGGAAATTGAAGGCCTG AATGATACTTTCAAAGAACTAGAATTTCTGAGTATGGCTAATGTGGAACTAAGTTCGCTGGCCCGGCTTCCCAGC TTAAATAAACTTCGAAAATTGGAGCTTAGTGATAATATAATTTCTGGAGGCTTGGAAGTCCTGGCAGAAAATGT CCAAATCTTACCTACCTCAATCTGAGTGGAAACAAAATAAAAGATCTCAGTACAGTAGAAGCTCTGCAAAATCTT AAAAATTTGAAAAGTCTTGACCTGTTTAACTGTGAGATCACAAACCTGGAAGATTATAGAGAAAGTATTTTGAA CTACTGCAGCAAATCACATACTTAGATGGATTTGATCAGGAGGATAATGAAGCGCCGGACTCTGAAGAGGAGGAT GATGAGGATGGAGATGAAGATGAAGAGGAAGAGGAAAATGAAGCTGGTCCACCGGAAGGATATGAGGAAGAG GAGGAGGAAGAGGAAGAGGATGAGGATGAAGATGAAGATGAAGCAGGTTCAGAGTTGGGAAGAGGA GAAGAGGAAGTGGGCCTCTCATACTTAATGAAAGAAGAATTCAGGATGAAGAAGATGATGATGACTATGTTGAA ${\tt GGAGAGGAAGAAGATGAC}{\color{blue}{\textbf{TAG}}}{\color{blue}{\textbf{ATCATTCTAAGACCAGATTCTCTAATGTTTCTGGGTGTGCAATAGAGTGATCAC}}$ ATCTTTGTTTCTTCATGTACGATAGCTATCCCTACAGAAGATAATGTGTAACTTTTTATAGGAAAAGTGTGGTTT TTGACTCCCATTGTGGAATTCCCTAGCAATTTATTTAGACTTAATTTTTTAAATTCAAGCTTACTGTATTAGTCA

MEMKKKINLELRNRSPEEVTELVLDNCLCVNGEIEGLNDTFKELEFLSMANVELSSLARLPSLNKLRKLELSDNI ISGGLEVLAEKCPNLTYLNLSGNKIKDLSTVEALQNLKNLKSLDLFNCEITNLEDYRESIFELLQQITYLDGFDQ EDNEAPDSEEEDDEDGDEDEEEEENEAGPPEGYEEEEEEEEEEEDEDEDEDEAGSELGEGEEEVGLSYLMKEE IQDEEDDDDYVEEGEEEEEEEGGLRGEKRKRDAEDDGEEEDD

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GTGGGGTCGCGTTGCCACCCCACGCGGACTCCCCAGCTGGCGCCCCTCCCATTTGCCTGTCCTGGTCAGGCCC CCTTCGCGCTTTTCTTGATCACTGTGGCTGGGGACCCGCTTCGCGTTATCATCCTGGTCGCAGGGGCATTTTTCT TCCAGTACGGCCTCCTGATTTTTGGTGCTGCTGTCTCTGTCCTTCTACAGGAGGTGTTCCGCTTTGCCTACTACA TGGCCTATGTTTCTGGTCTCCCTTCGGTATCATCAGTGGTGTCTTCTCTGTTATCAATATTTTGGCTGATGCAC TTGGGCCAGGTGTGGGATCCATGGAGACTCACCCTATTACTTCCTGACTTCAGCCTTTCTGACAGCAGCCA TGGTGGTTGGGAGTCACCTACTGACATCGGGACTGACATTCCTGAACCCCTGGTATGAGGCCAGCCTGCTGCCCA TCTATGCAGTCACTGTTTCCATGGGGCTCTGGGCCTTCATCACAGCTGGAGGGTCCCTCCGAAGTATTCAGCGCA GCTCTTGTGTAAGGACTGACTACCTGGAC<u>TGA</u>TCGCCTGACAGATCCCACCTGCCTGTCCACTGCCCATGACTGA GGTGGGTTTGAATCTGCACTTATCCCCACCACCTGGGGACCCCCTTGTTGTGTCCAGGACTCCCCTGTGTCAGT GCTCTGCTCTCACCCTGCCCAAGACTCACCTCCCTTCCCCTCTGCAGGCCGACGCAGGAGGACAGTCGGGTGAT GGTGTATTCTGCCCTGCGCATCCCACCCGAGGACTGAGGGAACCTAGGGGGGACCCCTGGGCCTGGGGTGCCCTC CTGATGTCCTCGCCCTGTATTTCTCCATCTCCAGTTCTGGACAGTGCAGGTTGCCAAGAAAAGGGACCTAGTTTA GCCATTGCCCTGGAGATGAAATTAATGGAGGCTCAAGGATAGATGAGCTCTGAGTTTCTCAGTACTCCCTCAAGA CTGGACATCTTGGTCTTTTTCTCAGGCCTGAGGGGGGAACCATTTTTGGTGTGATAAATACCCTAAACTGCCTTTT TTTCTTTTTTGAGGTGGGGGGGGGGGGGGGTATATTGGAACTCTTCTAACCTCCTTGGGCTATATTTTCTCTCC GTGCATGTTTGGGAACTGCCATTACTGGAACTAATGGTTTTAACCTCCTTAACCACCAGCATCCCTCCTCCCCC AAGGTGAAGTGGAGGTGCTGTGGTGAGCTGCCACTCCAGAGCTGCAGTGCCACTGGAGGAGTCAGACTACCAT AAACTGTATCATTTTCTGCTGAGGGTGGAGTGTCCCATCCTTTTAATCAAGGTGATTGTGATTTTGACTAATAAA AAAGAATTTGTAAAAA

MGAAVFFGCTFVAFGPAFALFLITVAGDPLRVIILVAGAFFWLVSLLLASVVWFILVHVTDRSDARLQYGLLIFG AAVSVLLQEVFRFAYYKLLKKADEGLASLSEDGRSPISIRQMAYVSGLSFGIISGVFSVINILADALGPGVVGIH GDSPYYFLTSAFLTAAIILLHTFWGVVFFDACERRRYWALGLVVGSHLLTSGLTFLNPWYEASLLPIYAVTVSMG LWAFITAGGSLRSIQRSSCVRTDYLD

MAKHLKFIARTVMVQEGNVESAYRTLNRILTMDGLIEDIKHRRYYEKPCRRRQRESYERCRRIYNMEMARKINFL MRKNRADPWQGC

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ATCTCTCCACTTCTGAGAAGCATCTGTGACATCACTGAAATTTTCAATCAGTATGTCTCTCATGATTGTGATGGA GCAGCATTAACTAAGAAAGACCTGAAGAACCTCCTTGAAAGGGAATTTGGAGCTGTGCTTCGGAGACCACATGAC CCTAAGACGGTAGATCTGATCCTGGAACTTCTGGATCTTGACAGTAATGGGCGTGTCGATTTCAACGAATTCCTC CTATTTATTTTCAAAGTGGCTCAAGCTTGTTACTATGCTCTCGGCCAGGCCACGGGACTGGATGAGGAAGCGA GCCCGGTGTGACGGAAAGGAGACCTGTTACAAGATCGCAGGCAAGAAGAAGACCAAAGGAGATTCGAGCCCCGG GGAGAGGAGCAAAGTGAGAAACAAGAGCGACTTGAACAGCGCGACAGGCACGCGCGACGAGGAGCTGTGGCGG CAAAGGCAAGAATGGCAAGAACGGGAAGAGCGCCGTGCAGAGGAAGAGCAGCTGCAGAGTTGCAAAGGTCACGAA ACTGAGGAGTTTCCAGACGAAGAGCAACTGCGAAGGCGGGAGCTGCTGGAGCTGAGGAGGAAGGGCCGCGAGGAG AAACAGCAGCAAAGGCGAGAGCGGCAAGACAGAGTGTTCCAGGAGGAAGAAGAGAAAGAGTGGAGGAAGCGCGAG ACAGTGCTCCGGAAGGAAGAGAGAGAGCCCGAACGTTGGCTGAAGCTCGAGGAGGAGGAGGAGGCGCGAGCAGCAG GAGAGGCTCCAGCAGCGGTTGAGGAGCGAGCAACAACTAAGACGCGAGCAGGAGGAGGAGGCGCGAGCAGCTGCTG AAGCGCGAGGAGAAGAGGCTCGAGCAGGAGAGGCGAGCAGCGGCTGAAGCGCGAGCAGGAGGAGAGGCGCGC CGACTGAAGCGCGAGGAGGTGGAGAGACTCGAGCAGGAGGAGGAGGCGCGAGCAGCGGCTGAAGCGCGAGGAGCCG GAGGAAGAGAGGCGCCAGCAGCTGCTGAAGAGCGAGGAGGAGGAGGAGGAGGCGCCAGCAACTAAGGCGCGAG CATGAGGAAGAGAGGCGCGAGCAGGAGCTAGCTGAGGAGGAGCAGGAACAGGCCCGGGAGCGGATTAAGAGCCGC ATCCCGAAGTGGCAGTGGCAGCTAGAAAGCGAGGCCGACGCCACGGCAAAGCAAAGTCTACTCGAGGCCCCGCAAG GAGGAACGGGCTCACCGGCAGCAGCAGGAAGAGGAGCAGCGCCGGGACTTCACATGGCAGTGGCAGGCGGAGGAA AAGAGCGAGAGGGGCCGTCAGAGGCTGTCGGCCAGGCCCCCATTGCGGGAGCAGCGGGAGAGGCAGCTGAGGGCC GAGGAGCGCCAGCAGCGGAACAACGGTTTCTCCCGGAGGAGGAGGAGGAGCAGCAGCGGCGCCAGCGACGC GAGAGGGAGAAAGAGCTGCAGTTCCTGGAGGAAGAGGAGCAGCTCCAGCGGCGGGAGCGTGCCCAACAGCTCCAG GAGGAGGAGGACGCCTCCAGGAGGATCAGGAGAGGAGGCGAAGCCAGGAGCAGCGCCGCGACCAAAAATGGAGG CAGGAGAGACAATACCGCGAGGAAGAGCAGCTGCAGCAGGAGGAAGAGCAGCTGCTGAGAGAAGAGAACGGGAGAAA GAGCAGCTGCTGAGAGAGGAACGGGAGAAGAGAGAGGCGCCAGGAGTGGGAGAGGCAGTACCGCAAAAAAGACGAG CTGCAGCAGGAAGAAGACAGCTGCTGAGAGAGAGAACGGGAGAAAAGAAGACTCCAGGAGCGGGAGAGGCAATAT CGGGAGGAAGAGGAGCTGCAGCAGGAGGAAGAGCAGCTGCTGGGAGAGGAACGGGAGAAGGCGCCAGGAG CTGGAGAGGCAATATCGGAAGGAAGAGGAGCTGCAGCAGGAGGAAGAGCAGCTGCTGAGAGAAGAGCAGCAGAAGA AGAAGGCGCCAGGAGCGGGAGAGGCAATGCAGAGAGAATGAACAGTTCCGGCAGTTGGAAGATTCCCAGCTGCGC CGCTGGCAGCGCGACAGGCATTTCCCAGAGGAAGAACAGCTGGAGCGAGAAGAGCAAAAGGAAGCCAAAAGG GACAGAAAATTCCGCGAGGAGGAACAGCTGCTCCAGGAAAGGGAGGAACAGCCGCTGCGCCGCCAAGAGCGTGAC AGAAAATTCCGCGAAGAGGAACTGCGCCATCAGGAACAAGGGAGAAAATTCCTCGAGGAGGAACAGCGGCTGCGC CGCCAGGAACGGGAGAAAATTCCTTAAGGAGGAACAGCAGCTGCGCTGCCAGGAGCGCGAGCAACAGCTGCGT CAGGACCGCGACAGAAAATTCCGCGAGGAGGAACAGCAGCTGAGCCGCCAAGAGCGTGACAGAAAATTCCGTGAA GAGGAACAGCAGGTGCGCCGCCAGGAACGAGAGAAAATTCCTGGAGGAGGAACAGCAGCTGCGCCAGGAGCGT CACAGAAAATTCCGCGAAGAGGGAACAGCTGCTCCAGGAAAGGGAAGAACAGCAGCTGCACCGCCAAGAGCGTGAC AGAAAATTCCTGGAGGAGGAACAACAGCTGCGCCGCCAAGAGCGTGACAGAAAATTCCGCGAACAGGAACTGCGC AGTCAGGAACCAGAGAGAAAATTCCTCGAGGAGGAACAGCAGCTGCACCGCCAGCAACGGCAGAAAAATTCCTC CAGGAGGAACAGCAGCTGCGCCGCCAGGAGCGCGGCGAACAGCGGCGTCAGGACCGTGACAGAAAATTCCGCGAG

368/6881 FIGURE 338B

GAGGAACAGCTGCGCCAGGAGAGGGAGGAACAGCAGCTGAGCCGCCAAGAGCGTGACAGAAAATTCCGTTTAGAG GAACAGAAAGTGCGCCGCCAGGAACAAGAGAGAAAATTCATGGAGGACGAACAGCAGCTGCGCCAGGAGGGC CAACAACAGCTGCGCCAGGAGCGCGACAGAAAATTCCGCGAAGACGACAGCTGCTCCAGGAAAGGGAAGAACAG CAGCTGCACCGCCAAGAGCGTGACAGAAAATTCCTCGAGGAGGAACCGCAGCTGCGCCGCCAGGAGCGCGCAACAA CAGCTGCGTCACGACCGCGACAGAAAATTCCGTGAAGAGGAACAGCTGCTCCAGGAAGGGGAAGAGCAGCAGCTG CGCCGCCAAGAGCGTGACAGAAAATTCCGCGAAGAGGAACAGCAGCTCCGCCGTCAGGAACGAGAGAAAAATTC CTCCAGGAGGAACAGCAGCTGCGCCAGGAACTGGAGAAAATTCCGTGAGGAGGAACAGCTGCGCCAAGAA GAAGAACAGCAGCTGCGCCGCCAGGAGCGCGACAGAAAATTCCGCGAGGAGGAACAGCTCCGCCAGGAGAGGGAG GAACAGCAGCTGCGCAGCCAAGAGTCTGACAGAAAATTCCGCGAGGAGGAACAGCTACGCCAGGAGAGGGAAGAA CAGCAGCTGCGCCCCCAACAGCGTGACGGAAAGTATCGCTGGGAAGAAGAGCAGCTCCAACTTGAGGAACAAGAG CAGAGGCTGCGGCAGGAGCCGCAGTACCGGCCGGAGGAGCAGTTTGCCACGCAGGAGAAGAGTCGTCGT GAGGAACAAGAACTATGGCAAGAAGAGGAGCAGAAACGTCGCCAGGAACGGGAAAGGAAATTACGGGAAGAACAC ATCCGCCGCCAGCAGAAGGAACAGAGGCACCGCCAAGTCGGGGAGATAAAATCCCAAGAAGGGAAGGGCCAT GGGCGGCTTCTGGAGCCCGGCACTCATCAGTTTGCCAGTGTCCCAGTGCGCTCCAGCCCTCTCTATGAGTACATC CAAGAGCAGAGATCTCAATACCGCCCT<u>TAA</u>

MSPLLRSICDITEIFNQYVSHDCDGAALTKKDLKNLLEREFGAVLRRPHDPKTVDLILELLDLDSNGRVDFNEFL LFIFKVAQACYYALGQATGLDEEKRARCDGKESLLQDRRQEEDQRRFEPRDRQLEEEPGQRRRQKRQEQERELAE GEEQSEKQERLEQRDRQRRDEELWRQRQEWQEREERRAEEEQLQSCKGHETEEFPDEEQLRRRELLELRRKGREE KQQQRRERQDRVFQEEEEKEWRKRETVLRKEEEKRERWLKLEEEERREQQERREQQLRREQEERREQRLKRQEEEERLOORLRSEOOLRREOEERREQLLKREEEKRLEQERREQRLKREQEERRDQLLKREEERRQQRLKREQEERLEQ RLKREEVERLEQEERREQRLKREEPEEERRQQLLKSEEQEERRQQQLRREQQERREQRLKREEEEERLEQRLKRE HEEERREQELAEEEQEQARERIKSRIPKWQWQLESEADARQSKVYSRPRKQEGQRRRQEQEEKRRRRESELQWQE ${\tt EERAHRQQQEEEQRRDFTWQWQAEEKSERGRQRLSARPPLREQRERQLRAEERQQREQRFLPEEEEKEQRRRQRR$ EREKELQFLEEEEQLQRRERAQQLQEEEDGLQEDQERRRSQEQRRDQKWRWQLEEERKRRRHTLYAKPALQEQLR KEQQLLQEEEEELQREEREKRRRQEQERQYREEEQLQQEEEQLLREEREKRRRQERERQYRKDKKLQQKEEQLLG EEPEKRRRQEREKKYREEEELQQEEEQLLREEREKRRRQEWERQYRKKDELQQEEEQLLREEREKRRLQERERQY $\verb"REEEELQQEEEQLLGEERETRRRQELERQYRKEEELQQEEEQLLREEPEKRRRQERERQCRENEQFRQLEDSQLR"$ DRQSQQDLQHLLGEQQERDREQERRRWQQRDRHFPEEEQLEREEQKEAKRRDRKSQEEKQLLREEREEKRRRQET DRKFREEEQLLQEREEQPLRRQERDRKFREEELRHQEQGRKFLEEEQRLRRQERERKFLKEEQQLRCQEREQQLR QDRDRKFREEEQQLSRQERDRKFREEEQQVRRQERERKFLEEEQQLRQERHRKFREEEQLLQEREEQQLHRQERD RKFLEEEQQLRRQERDRKFREQELRSQEPERKFLEEEQQLHRQQRQRKFLQEEQQLRRQERGQQRRQDRDRKFRE EEQLRQEREEQQLSRQERDRKFRLEEQKVRRQEQERKFMEDEQQLRRQEGQQQLRQERDRKFREDEQLLQEREEQ QLHRQERDRKFLEEEPQLRRQEREQQLRHDRDRKFREEEQLLQEGEEQQLRRQERDRKFREEEQQLRRQERERKF LQEEQQLRRQELERKFREEEQLRQETEQEQLRRQERYRKILEEEQLRPEREEQQLRRQERDRKFREEEQLRQERE EQQLRSQESDRKFREEEQLRQEREEQQLRPQQRDGKYRWEEEQLQLEEQEQRLRQERDRQYRAEEQFATQEKSRR EEQELWQEEEQKRRQERERKLREEHIRRQQKEEQRHRQVGEIKSQEGKGHGRLLEPGTHQFASVPVRSSPLYEYI QEQRSQYRP

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MAKISSPTETERCIESLIAVFQKYAGKDGYNYTLSKTEFLSFMNTELAAFTKNQKDPGVLDRMMKKLDTNSDGQL DFSEFLNLIGGLAMACHDSFLKAVPSQKRT

372/6881 FIGURE 342

GACCTCCTAGGGCTAATCTGATAGTGCCTCTGAGGTCGATAGGACTCCACGTGCCACTCCCTGCAGGGTCATCCA GCAAGTAATTCCTAGACCCGTAGGTGGCCGCAGAGCCGGTTACCTCTGGTTCTGCGCCAGCGTGCCCCACCCGCA GGACGGCCGGGTTCTTTGATTTGTACACTTTCTAAAACCAAACCCGAGAGGAAGGGCAGGCTCAGGGTGGGGATG GCCTCTGCGAGGGGGTCCGGGAGCGAGGGCAGGGCGTGGGCCGCGCGCCCGGGGTCGGGGGAGTCGGGGGCAGG CCCTCTACCCACCCGCCGCACGTACTAAGGAAGGCGCACAGCCCGCCGCGCGCTCCGCCTCCCGCCCCGCGTCCAGC ${\tt TCGCCCAGCTCGCCCAGCGTCCGCCGCGCCTCGGCCAAGGCTTCAACGGACCACACCAAA\underline{{\tt ATG}}{\tt CCATCTCAAATG}$ GAACACGCCATGGAAACCATGATGTTTACATTTCACAAATTCGCTGGGGATAAAGGCTACTTAACAAAGGAGGAC CTGAGAGTACTCATGGAAAAGGAGTTCCCTGGATTTTTGGAAAATCAAAAAGACCCTCTGGCTGTGGACAAAATA ATGAAGGACCTGGACCAGTGTAGAGATGGCAAAGTGGGCTTCCAGAGCTTCTTTTCCCTAATTGCGGGCCTCACC ${\tt ATTGCATGCAATGACTATTTTGTAGTACACATGAAGCAGAAGGGAAAGAAGTAGGCAGAAATGAGCAGTTCGCTC}$ $\verb|CTCCCTGATAAGAGTTGTCCCAAAGGGTCGCTTAAGGAATCTGCCCCACAGCTTCCCCCATAGAAGGATTTCATG|\\$

 ${\tt MPSQMEHAMEIMMFIFHKFAGDKGYLTKEDLRVLMEKEFPGFLENQKDPLAVDKIMKDLDQCRDGKVGFQSFFSLIAGLIIACNDYFVVHMKQKGKK}$

 $\tt CGGCTGAAGCGCCGGCGGGGGCTCACTGTGGTGGTGTGAGTGGGAGGCGGCGGCGCTGGTGGCTGCAGCTGGG$ GTGAGGCGCGAGGCGCCACTCGACGGCTGACTGGAGCAGCGGTAAAGGCGAGGATGGAGACCGAAGGATATAA GTCAAAGAGTACAGCAGAAAA<u>TG</u>TCTACTGAACGGACTTCTTGGACAAGCCTGTCCACCATTCAGAAAATAGCCC TGGGCCTTGGGATCCCAGCCAGTGCAACAGTTGCCTATATCCTATACCGCAGGTATAGGGAAAGCAGAGAAGACGC GGCTGACATTTGTTGGGGAAGATGACATTGAGATAGAGATGCGGGTTCCCCAGGAGGCTGTGAAACTCATCATTG GCGATGAGCGAGTGCTGCTTATCAGTGGTTTTCCTGTTCAGGTGTGCAAGGCCAAAGCAGCAATCCATCAGATCC TGACAGAGAATACCCCAGTGTCTGAGCAGCTTTCAGTTCCCCAGAGATCTGTGGGCAGAATCATAGGGAGAGGCG GCGAGACAATTCGTTCTATCTGTAAGGCATCTGGAGCCAAAATTACCTGTGACAAAGAATCAGAAGGGACATTAC TTTCAGAAGATGAAGAACTTCGGAAGAGAATTGCTCATTCTGCAGAAACCAGGGTCCCACGCAAACAGCCAATCA GTGTGAGAAGAGACATGACAGAGCCAGGTGGAGCTGGAGAGCCAGCATTATGGAAAAACACCAGTTCTAGCA TGGAGCCGACTGCACCCCTGGTGACTCCTCCACCCAAAGGAGGGGGGGACATGGCTGTGGTAGTGTCAAAGGAAG GTTCCTGGGAGAACCTAGTGATGACAGCTTTCAGAAGTCTGAAGCCCAGGCCATCCCAGAGATGCCCATGTTTG AAATCCCCAGTCCTGACTTCAGTTTTCATGCTGATGAGTACCTAGAAGTCTACGTTTCTGCTTCTGAGCACCCTA ACCACTTCTGGATCCAGATCGTTGGCTCCCGCAGCCTGCAATTGGATAAGCTTGTCAATGAGATGACCCAGCACT ATGAGAATAGTGTGCCTGAAGACTTGACTGTGCATGTAGGAGACATTGTAGCAGCACCTTTACCTACAAATGGTT CCTGGTATCGAGCCCGGGTCCTCGGCACCTTGGAGAATGGGAACTTGGACCTCTATTTTGTTGACTTTGGAGATA ATGGAGATTGCCCACTGAAGGACCTCAGGGCTCTCAGGAGTGACTTCCTAAGCCTTCCATTTCAAGCAATAGAAT ATTGTGCTGACTGGAAGCCTCTGGTAGCCAAGATCTCTAGCTATGTCCAGACTGGGATCTCAACTTGGCCAAAGA TCTACTTATATGATACTAGCAATGGGAAGAACTTGATATTGGGCTAGAATTAGTACACAAAGGATACGCAATTG AGCTTCCTGAAGACATAGAAGAAAACAGAGCTGTCCCAGACATGTTGAAGGACATGGCCACAGAAACAGATGCCT CTCTCAGCACGTTGCTCACTGAGACCAAAAAGAGCTCTGGAGAGATAACACATACCCTGTCCTGCCTCAGCTTAT TCAGCCATCTGCTTTGCTGTATGTTGCCTGCAATGAACTCGCTGAAGCATGCTCAGCCCTGGAACTGGTGCTACC AGAGTTCCGTAGGGAACCTTTACTCTTTAGAGGTTCCC<u>TGA</u>TATAAATCATTCATAAGACTTCCTACCCTGGAAA ATGAGTAATGTCTCATTCTTACCTGCAGTTTGTTACTATGTATAAAAGTCTTTTTCTTTAATATGCCTTTAAGTC TTACCTGTTTACAGCCCATTCTGATGGGTTCTTTGTCATTCTGTTAGTATAACCCAGTACTTTTCCTGCTGCCTG GAATGCCCTCTTCTATGTTACCTATTCTGTCCGTTGAGATGCCCCAACTTGGGCCAAAGCCAAGAGATCTATGTG AAAAA

MSTERTSWTSLSTIQKIALGLGIPASATVAYILYRRYRESREERLTFVGEDDIEIEMRVPQEAVKLIIGRQGANI
KQLRKQTGARIDVDTEDVGDERVLLISGFPVQVCKAKAAIHQILTENTPVSEQLSVPQRSVGRIIGRGGETIRSI
CKASGAKITCDKESEGTLLLSRLIKISGTQKEVAAAKHLILEKVSEDEELRKRIAHSAETRVPRKQPISVRREDM
TEPGGAGEPALWKNTSSSMEPTAPLVTPPPKGGGDMAVVVSKEGSWEKPSDDSFQKSEAQAIPEMPMFEIPSPDF
SFHADEYLEVYVSASEHPNHFWIQIVGSRSLQLDKLVNEMTQHYENSVPEDLTVHVGDIVAAPLPTNGSWYRARV
LGTLENGNLDLYFVDFGDNGDCPLKDLRALRSDFLSLPFQAIECSLARIAPSGDQWEEEALDEFDRLTHCADWKP
LVAKISSYVQTGISTWPKIYLYDTSNGKKLDIGLELVHKGYAIELPEDIEENRAVPDMLKDMATETDASLSTLLT
ETKKSSGEITHTLSCLSLSEAASMSGDDNLEDDYLLGSLGFSLLSHLLCCMLPAMNSLKHAQPWNWCYQSSVGNL
YSLEVP

377/6881 FIGURE 347

MEAFLGSRSGLWAGGPAPGQFYRIPSTPDSFMDPASALYRGPITRTQNPMVTGTSVLGVKFEGGVVIAADMLGSY GSLARFRNISRIMRVNNSTMLGASGDYADFQYLKQVLGQMVIDEELLGDGHSYSPRAIHSWLTRAMYSRRSKMNP LWNTMVIGGYADGESFLGYVDMLGVAYEAPSLATGYGAYLAQPLLREVLEKQPVLSQTEARDLVERCMRVLYYRD ARSYNRFQTATVTEKGVEIEGPLSTETNWDIAHMISGFE

378/6881 FIGURE 348

GCACTATGGTGTGTGTGGACAACAGTGAGTATATGCGGAATGGAGACTTCTTACCCACCAGGCTGCAGGCCCAGC AGGATGCTGTCAACATAGTTTGTCATTCAAAGACCCGCAGCAACCCTGAGAACAACGTGGGCCTTATCACACTGG CTAATGACTGTGAAGTGCTGACCACACTCACCCCAGACACTGGCCGTATCCTGTCCAAGCTACATACTGTCCAAC CCAAGGGCAAGATCACCTTCTGCACGGGCATCCGCGTGGCCCATCTGGCTCTGAAGCACCGACAAGGCAAGAATC ACAAGATGCGCATCATTGCCTTTGTGGGAAGCCCAGTGGAGGACAATGAGAAGGATCTGGTGAAACTGGCTAAAC GCCTCAAGAAGGAGAAAGTAAATGTTGACATTATCAATTTTGGGGAAGAGAGGTGAACACAGAAAAGCTGACAG CCTTTGTAAACACGTTGAATGGCAAAGATGGAACCGGTTCTCATCTGGTGACAGTGCCTCCTGGGCCCAGTTTGG CTGATGCTCTCATCAGTTCTCCGATTTTGGCTGGTGAAGGTGGTGCCATGCTGGGTCTTGGTGCCAGTGACTTTG AATTTGGAGTAGATCCCAGTGCTGATCCTGAGCTGGCCTTGGCCCTTCGTGTATCTATGGAAGAGCAGCGGCAGC GGCAGGAGGAGGAGGCCCGGCGGCAGCTGCAGCTTCTGCTGCTGAGGCCGGGATTGCTACGACTGGGACTGAAG ACTCAGACGATGCCCTGCTGAAGATGACCATCAGCCAGCAAGAGTTTTGGCCGCACTGGGCTTCCTGACCTAAGCA GTATGACTGAGGAAGAGCAGATTGCTTATGCCATGCAGATGTCCCTGCAGGGAGCAGAGTTTGGCCAGGCGGAAT AGGACCCCGAGTTCCTTCAGAGTGTCCTAGAGAACCTCCCAGGTGTGGATCCCAACAATGAAGCCATTCGAAATG GGAGGGAAAGGGTAGCTGAGTCTGCTTAGGGGACTGCATGGGAAGCACGGAATATAGGGTTAGATGTGTTTATC TGTAACCATTACAGCCTAAATAAAGCTTGGCAACTTTT

$$\label{thm:consequence} \begin{align} MVLESTMVCVDNSEYMRNGDFLPTRLQAQQDAVNIVCHSKTRSNPENNVGLITLANDCEVLTTLTPDTGRILSKL\\ HTVQPKGKITFCTGIRVAHLALKHRQGKNHKMRIIAFVGSPVEDNEKDLVKLAKRLKKEKVNVDIINFGEEEVNT\\ EKLTAFVNTLNGKDGTGSHLVTVPPGPSLADALISSPILAGEGGAMLGLGASDFEFGVDPSADPELALALRVSME\\ EQRQRQEEEARRAAAASAAEAGIATTGTEDSDDALLKMTISQQEFGRTGLPDLSSMTEEEQIAYAMQMSLQGAEF\\ GQAESADIDASSAMDTSEPAKEEDDYDVMQDPEFLQSVLENLPGVDPNNEAIRNAMGSLASQATKDGKKDKKEED\\ KK\\ \end{align*}$$

380/6881 FIGURE 350

CTGGTGAGGGGCTGCAGGTGGCGCGCAGTCTCGGTAGGCGGT<u>ATG</u>AGTTTGGCTGGGGGCCGGGCACCCCGGAA GACCGCTGGGAACCGGCTTTCTGGGCTTTTGGAGGCAGAGGAGGAGGAGGTGAGTTCTACCAGACGACTTATGGGGG TTTCACAGAGGAATCCGGAGATGATGAGTATCAAGGGGACCAGTCAGACACAGAGGACGAAGTGGACTCTGACTT CAAGGCCTATAAGGAACCTCTCAAGAGCTTAAGGCCTCGAAAGGTCAACACCCCGGCTGGTAGCTCTCAGAAGGC GCGAGAAGAGAGGCACTACTGCCATTAGAACTACAAGATGACGGCTCTGACAGTCGGAAGTCTATGCGTCAGTC TACAGCTGAGCATACACGACAAACGTTCCTTCGGGTACAGGAGGGCAGGGCCAGTCAAGACGGCGAAAGGGGCC CCACTGTGAGCGGCCACTAACCCAGGAGGAACTGCTCCGGGAGGCCAAGATCACAGAAGAGCTTAATTTACGGTC ACTGGAGACATATGAGCGGCTCGAGGCTGATAAAAAGAAGCAGGTTCATAAGAAGCGGAAGTGCCCCGGGCCCAT AATCACCTATCATTCAGTGACAGTGCCACTTGTTGGGGAGCCAGGCCCCAAGGAAGAACGTTGACATAGAAGG ACTTGATCCTGCTCCCTCGGTGTCTGCATTGACTCCTCATGCTGGGACCCGTCAACCCCCCTGCTCGCTG $\tt CTCACGTACCTTCATCACTTTTAGTGATGCAACTTTCGAGGAATGGTTCCCCCAAGGGCCGCCCCAAAAGT$ CCCTGTTCGTGAGGTCTGTCCAGTGACCCATCGTCCAGCCCTATACCGGGACCCTGTTACAGACATACCCTATGC CACTGCTCGAGCCTTCAAGATCATTCGTGAGGCTTACAAGAAGTACATTACTGCCCATGGACTGCCGCCCACTGC TGTCATTAAATGAAGAGATGTCTAGTCCTCAGAAACTTCTTTCCTGCCCTGATTGGGGCTCTTGCTGTTCCGTTT CTTCTCCCTGCTTCTCCCCTTTGTCATCTCTGATCTTTGCCTAATCTGTTTCTTTTTCCTTTTCCCCTAGTTCTT ACAGGTTTCGTTGTGTTTTTTAATCTAATAAAATAGAAAGATCCCTTTT

FIGURE 351

MSLAGGRAPRKTAGNRLSGLLEAEEDEFYQTTYGGFTEESGDDEYQGDQSDTEDEVDSDFDIDEGDEPSSDGEA EEPRRKRRVVTKAYKEPLKSLRPRKVNTPAGSSQKAREEKALLPLELQDDGSDSRKSMRQSTAEHTRQTFLRVQE RQGQSRRKGPHCERPLTQEELLREAKITEELNLRSLETYERLEADKKKQVHKKRKCPGPIITYHSVTVPLVGEP GPKEENVDIEGLDPAPSVSALTPHAGTGPVNPPARCSRTFITFSDDATFEEWFPQGRPPKVPVREVCPVTHRPAL YRDPVTDIPYATARAFKIIREAYKKYITAHGLPPTASALGPGPPPPEPLPGSGPRALRQKIVIK

CCTGGCTTTGTGCATTGGGTTCTGGTGCCTGATGGACACATTTTTCCAGTTACAGGCCGAATGGTCTCAATGTAG GTCCCTCATAGCTTCCTAGAAAGAAACCACTTGTCAGTCTTCATGCTACAGCAACTTCTTTGTGGCCCATGGCCT TTCCTTGCTTAGATACTCCACATACTGTTCTCCCCGCAGGGGCGGCCGTTGAGGGGCTGCAGAGGCACCCTCC CACGTCCCGCGCAGTGCAGTGCCTCCGCAGTCCAGAGGGGGAGCAGTGCGCCGGGGCTCCGAGCCGGACGGGTTTCG TAATCGCGTCGCCGCCTTCCGCCCTCAGCCGGCCCCACCTCTGCCGGCTCGTACTCGGCTCCCCACCTCGCC GCAGAGCTAGCCCGGGAAGCCCACACTGGCGGCCACGGAGCAGAGTCCCTCACCCCCACCAGCTGTAGCTGAACG GGTGCGCCCCGGGGTGGCCGTAGTCATCCACGCTCCTGGGGTGCGCAGGCTGAGGCCGCTGAAGAGTAGAAGGA TAAGGGTTGAGAACAGCAGAGAACTTCTAGGTAGAGTTGTGTAGTGGGGGGGAGACAGATACGGAATCTGTGTGAT TGAATATATTTGGGGAGGGAGGCTTAGGGCCTAGCCCTCTTTCCTCTTAAGCCCCCAGAAGACCTTTCCTGGGG AAGGGAAGGTTGGTGTTGGCCTGTCACTTGGCTGAAATATGGAGTCCACACCGCTTCTCCAGAGTCCCTCAGCA GCCCTCCATGTCTCGGGGTCTCCACACAGGGACCAGCTGCTGCCCCGGGCTTCTAGCCAGAATTGCCCATGCCAT TCTCTCGATTCTTTCTTCTCCAGCTGCTTCATGTGAGGGCTTGTCAGGCCGCGGGTTGGAGGCCTTAGGGCC TGGCACCTCTTTCCCATCCCTTCTGCTCACCTCCCAACAGCTCTGAGACCCTCAAGTCCTAGTATGATCTTGGTG GGGGCGGGGGGGGGCTTCCCGGTTCCATATTTCACTCTTGCCATTTGGAACTCAGAGAGGTCGAGTTCTGAGCA CCACTTGGCTCTCAGGACGTGGCCTTATGAGGTCTAATCCTCATCCCTCCTGTTGTTTTCTCAGCCCCTTCCCTA TTCACTGTGGGGTTGGATTCGGGTGGCTCTTCCGCCTGGGCTGACCAGCTCAGGACTTCATTTTTCCTCAACCCA CTCTCTTCTGGCTGCTTTAAAGAAGAGTGGCCGCCAGTGGCTCTTACTTCCTTTTCTGGCTTTGTTCCCATCCCC CACTGCCCTGCGCTACCATCACATTCACCCTGACCTGTCTTCTTCACACTCTGACCCCACCCTCAAGTTTCAGAG ACCCTAATGTCCTAGGGAATGGAATTTCCTGGTCACTTCTCGTCATCATTGGTCATTTCATGCCAAGTCCCACAC ACACGCTTTCCCTCCACCCAGCTCTGGTCAGGTCCCTGGAAAAGAAACAGAAATGGCCTTGTTCTCCCACTGCC CCTTTCCCTCTCTCTCTCCCCCCTCTCTTCTCTCTCCCCAGCACTATCCACCTCTGTCCCTCAGCTTTG CCCACTGACCACAGCTCCCCTCTCTGGACAGCGTGTTTTAGCTTCCGCTCCTTCTGGTTACTCCCTTCCAGT GGTGAGAAGAGAAGAGAAAGCCCAGCCTCCTGGGTTCTCCCCTCCCCTAGAAGCTACATTTGAGTGTTTGTGTGA TCTCATCTCAAGGCTGTT

AGTCAGCACGGGGGTGCTGGAAGAGTCGGGAATAATAGCGCAGACCAATGAGCCTAGGGAGATGCTTTCATCGT CCGCCCTTCTTAGGAGGGGCTGCATTGCAGGGGGAGAGTGAACTGACAGACTCAGTCACTGAAGAGGGAAAAGGA GTGAGAAGACAAAGCCGTCAAAGCCCCAACAGCTTTGTATTTCTCCAGCCCGGCGCAGACCCCGGAGCTCCCGAG GTACAGTTCCTTTCTTTCTGGAGGATGCCCATCCCAGAACTGGATCTGTCGGAGGCTGGAAGGCCTGGGTCTGTC GAAAAACCCTGAAGGTGATGGCCTCCTTGAGTACAGCACCTTCAACTTCTGGAGAGGCTCCCATTGCCAGCATCCA AGCCCCTTCCTTTCCACTCTTTCCATTTTAATCTTGTTCTCTCCCTACTGTTGTTGGTGGTGCTGATGAATCTG ${\tt CCAGAGTTGAGTTCTATGTATTTATCTATCTGTCTACTCCATTTCTCTCAAAAGCCCTCAAGTCACAAAGT}$ AAATGGTTCAAGCAATGGAGTACTGGGTCACAGGGATTCCTCCTTTCCCCCCCAAATATTAACTCCAGAAACTAG GCCTGACTGGGGACACCTGAGAGTAGTAGTAGTAGTGCAAAATGGAAGACTGATTTTTGACTCTATTATAATCAGC TTCAGAGATTCCTTAAACCTTCCTAATTTCCTGCTCCAGGGCAGTAAACACAAATATTTCTTCAAGGGGTGATGA AAACCTCGGAAGTTTTAATTTGAGGTTATCTGCTACGAAACAGTATTTCTAAAAGGCTAAAGTGATAAGTCTCTT GCTTTTTTTGATCCTGCTCTTATATTCTTTTTTTCCTCAGAGAAATCAGGAGGGTAGTTAGAGGTATAAAACA GGAGGAAATATTATGGAAAATGAAAATAGGGAAAATAATTGAATCATTTTAGAAGTAGCTAATTTCTTTTCTCAA AAGAGTGTCCCTTCTTCACACCTACTCACTTTACAACTTTGCTCCTAACTGTGGGTTGAAAACTCTAGCTAAAGA AAGTTATCAAATCTTAACATGCATTCCTACTATTATGATAGTTTTTAAGGTTTCAATTCAATCTTCTGAACGGCA TAAGTCCTATTTTAGCCTTACCTCCTGCATTTGCAATACGTAATACTGATCAGTGGGCACAGTTCTTCAGCTACA TTGAGACCCTGAAATGAACAATTATATTCTGACTCGACATCTTGTCCCCAATCCTTCCAAAAATATTGATGGTGA TTTGTGCTACCATTTACTCGTTTATTTAATAAAGACATTCAATCCC

384/6881 FIGURE 354

GGGGGCGGGCGACGCCGGACTCCGGAGCGCCCGCTTACGCAGTTCCTCCCGGGGTCGGAGGCCGATTCGCCGTG ACCTCTCCTCGACCAGGGGCACCTCTACTCGACCAGGGGCGACGGCGTACTTTGGGCTTCATCATCATGAGGACTAC CTGCAGGGTTGTCGAGCTGCTCTGCAGGAGTCCCGACCTCTACATGTTGTGCTGGGAAATGAAGCCTGTGATTTG GACTCCACAGTGTCTGCTCTTGCCCTGGCTTTTTACCTAGCAAAGACAACTGAGGCTGAGGAAGTCTTTGTGCCA GTTTTAAATATAAAACGTTCTGAACTACCTCTGCGAGGTGACATTGTCTTCTTCTTCAGAAGGTTCATATTCCA GAGAGTATCTTGATTTTTCGGGATGAGATTGACCTCCATGCATTATACCAGGCTGGCCAACTCACCCTCATCCTT GTCGACCATCATATCTTATCCAAAAGTGACACAGCCCTAGAGGAGGCAGTAGCAGAGGTGCTAGACCATCGACCC ATCGAGCCGAAACACTGCCCTCCCTGCCATGTTTCAGTTGAGCTGGTGGGGTCCTGTGCTACCCTGGTGACCGAG AGAATCCTGCAGGGGGCACCAGAGATCTTGGACAGGCAAACTGCAGCCCTTCTGCATGGAACCATCATCCTGGAC TGTGTCAACATGGACCTTAAAATTGGAAAGGCAACCCCAAAGGACAGCAAATATGTGGAGAAACTAGAGGCCCTT TTCCCAGACCTACCCAAGAGAAATGATATTTGATTCCCTACAAAAGGCAAAGTTTGATGTATCAGGACTGACC ACTGAGCAGATGCTGAGAAAAGACCAGAAGACTATCTATAGACAAGGCGTCAAGGTGGCCATTAGTGCAATATAT ATGGATTTGGAGGCCTTTCTGCAGAGGTCTAACCTCCTTGCAGATCTCCATGCTTTCTGCCAGGCTCACAGCTAT GATGTCCTGGTTGCCATGACTATCTTTTTCAACACTCACAATGAGCCAGTGCGGCAGTTGGCTATTTTCTGTCCC CATGTGGCACTCCAAACAACGATCTGTGAAGTCCTGGAACGCTCCCACTCTCCACCCCTGAAGCTGACCCCTGCC CTCCAGGAAGCCCTGTCAGCATATTTTGACTCCATGAAGATCCCTTCAGGACAGCCTGAGACAGCAGATGTGTCC AGGGAGCAAGTGGACAAGGAATTGGACAGGGCAAGTAACTCCCTGATTTCTGGCCTGAGTCAAGATGAGGAGGAC CCTCCGCTGCCCCGACGCCCATGAACAGCTTGGTGGATGAGTGCCCTCTAGATCAGGGGCTGCCTAAACTCTCT GCTGAGGCCGTCTTCGAGAAGTGCAGTCAGATCTCACTGTCACAGTCTACCACAGCCTCCCTGTCCAAGAAGTGA

 $\tt CTGTTGAGAGGCGAGGGTGAGGTGAGGCTACCTGACTCACTTCAAATGCATGTTTTGAGATGTTTGGAGAT$ GAAAGCAGCTGCTTTAAGAATGGTTTTCCACCTTTTCCCCCTAATCTCTACCAATCAGACACATTTTATTATTTA AATCTGCACCTCTCTATTTTATTTGCCAGGGGCACGATGTGACATATCTGCAGTCCCAGCACAGTGGGACAAA AAGAATTTAGACCCCAAAAGTGTCCTCGGCATGGATCTTGAACAGAACCAGTATCTGTCATGGAACTGAACATTC GAAAAGAGAGTGCGCTTTGGAAATTTATTCCAGTTTTCAGCCTACAGCAGATTATCAGCTCGGTGACTTTTCTTT CTGCCACCATTTAGGTGATGGTGTTTGATTCAGAGATGGCTGAATTTCTATTCTTAGCTTATTGTGACTGTTTCA GATCTAGTTTGGGAACAGATTAGAGGCCATTGTCTTCTGTCCTGATCAGGTGGCCTGGTTTCTTTGGATCCC TCTGTCCCAGAGCCACCCAGAACCCTGACTCTTGAGAATCAAGAAAACACCCAGAAAGGCCTTAATGACCTCATA TTCTTGTCAATCTCTTTTTTCCTTGCTCACATTAAAAGGAAGCATGGAGTTCTAATGCTCCCATAAACTATGTA TTTTGGCAAGACACTTCACTACTCCAGGTCTCACTTTCCCCATCTGTAAAACAGGGTTTGGACTAGGTGTTCCCT GGTATTCTGTGATCTGCCTCTTGCTGCCATTCTTTCTCTCCTCTGCTTCTCTGTATTTTŢCTTCTGTTATCCCTG GGGGTGCTCAGGTTCACTTGATTGTCTGTATTTCTGTGTGGTTGTAGCAAGGACTCAGCCTCATGTAGCACGAAT CCCATTTTTTTTAACGCAACCCTTTCCCCTTTTTCCTACCCCACAGCTCTGTTCCATGTAAGTTGCCAACAGTTT CACTGAACAGTGGGGTATGTGATGGTTTTGGCATGACATCTTCAGTATGAGGGGGACAGTTTGACTTCACTTTGA GGGTGTGATGTCTGTAGCTATGTGGAAGGTAAAAATAGTGGTGTGATCATGAACCAAAGGAATTTATGTTTTGTA ACTTGGGTACTTTATTTTGCATTTTGTTATACTATTAAATAATTTTTTCCTGTT

MEDYLQGCRAALQESRPLHVVLGNEACDLDSTVSALALAFYLAKTTEAEEVFVPVLNIKRSELPLRGDIVFFLQK
VHIPESILIFRDEIDLHALYQAGQLTLILVDHHILSKSDTALEEAVAEVLDHRPIEPKHCPPCHVSVELVGSCAT
LVTERILQGAPEILDRQTAALLHGTIILDCVNMDLKIGKATPKDSKYVEKLEALFPDLPKRNDIFDSLQKAKFDV
SGLTTEQMLRKDQKTIYRQGVKVAISAIYMDLEAFLQRSNLLADLHAFCQAHSYDVLVAMTIFFNTHNEPVRQLA
IFCPHVALQTTICEVLERSHSPPLKLTPASSTHPNLHAYLQGNTQVSRKKLLPLLQEALSAYFDSMKIPSGQPET
ADVSREQVDKELDRASNSLISGLSQDEEDPPLPPTPMNSLVDECPLDQGLPKLSAEAVFEKCSQISLSQSTTASL
SKK

GAAACAAGCACTGGATTCCATATCCCACTGCCAAAACCGCATGGTTCAGATTATCGCTATTGCAGCTTTCATCAT CACAGGAAGCAATATAACAACAAGGTGGATGAAATCTCTCGGCGTTTAATTTGGGAAAAAAACCTGAAGTATATT AGTGAAGAGGTGGTTCAGAAGATGACTGGACTCAAAGTACCCCTGTCTCATTCCCGCAGTAATGACACCCTTTAT CAGGGTCAGTGTGGGTTCCTGTTGGGCTTTTAGCTCTGTGGGTGCCCTGGAGGGCCCAACTCAAGAAGAAAACTGGC AAACTCTTAAATCTGAGTCCCCAGAACCTAGTGGATTGTGTGTCTGAGAATGATGGCTGTGGAGGGGGCCTACATG ACCAATGCCTTCCAATATGTGCAGAAGAACCGGGGTATTGACTCTGAAGATGCCTACCCATATGTGGGACAGGAA GAGAGTTGTATGTACAACCCAACAGGCAAGGCAGCTAAATGCAGAGGGGTACAGAGAGATCCCCGAGGGGAATGAG AAAGCCCTGAAGAGGGCAGTGGCCCGAGTGGGACCTGTCTCTGTGGCCATTGATGCAAGCCTGACCTCCTTCCAG TTTTACAGCAAAGGTGTGTATTATGATGAAAGCTGCAATAGCGATAATCTGAACCATGCGGTTTTGGCAGTGGGA TATGGAATCCAGAAGGGAAACAAGCACTGGATAATTAAAAACAGCTGGGGAGAAAACTGGGGAAACAAAGGATAT CCAGCCAAATCCATCCTGCTCTTCCATTTCTTCCACGATGGTGCAGTGTAACGATGCACTTTGGAAGGGAGTTGG ATCCTTCCTACTTTGCTTCTCCCACCCATGACCTTTTTCACTGTGGCCATCAGGACTTTCCCTGACAGCTGTGT ACTCTTAGGCTAAGAGATGTGACTACAGCCTGCCCTGACTGTTGTCCCAGGGCTGATGCTGTACAGGTACAG GCTGGAGATTTTCACATAGGTTAGATTCTCATTCACGGGACTAGTTAGCTTTAAGCACCCTAGAGGACTAGGGTA ATCTGACTTCTCACTTCCTAAGTTCCCTTCTATATCCTCAAGGTAGAAATGTCTATGTTTTCTACTCCAATTCAT AAATCTATTCATAAGTCTTTGGTACAAGTTTACATGATAAAAAGAAATGTGATTTGTCTTCCCTTCTTTGCACTT TTGAAATAAAGTATTTATC

MWGLKVLLLPVVSFALYPEEILDTHWELWKKTHRKQYNNKVDEISRRLIWEKNLKYISIHNLEASLGVHTYELAM NHLGDMTSEEVVQKMTGLKVPLSHSRSNDTLYIPEWEGRAPDSVDYRKKGYVTPVKNQGQCGSCWAFSSVGALEG QLKKKTGKLLNLSPQNLVDCVSENDGCGGGYMTNAFQYVQKNRGIDSEDAYPYVGQEESCMYNPTGKAAKCRGYR EIPEGNEKALKRAVARVGPVSVAIDASLTSFQFYSKGVYYDESCNSDNLNHAVLAVGYGIQKGNKHWIIKNSWGE NWGNKGYILMARNKNNACGIANLASFPKM

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 ${\tt GGCACGAGGAAGGAAC} {\color{red} {\bf ATG}} {\tt GCCCTGTATCAGAGGTGGCGGTGTCTCCGGCTCCAAGGTTTACAGGCTTGCAGGCT}$ ACACACGGCAGTTGTCGACCCCTCCACGCTGGTTGGCAGAGCGGCTTGGCCTTTTTGAGGAGCTGTGGGCTGC TCAGGTAAAGAGATTAGCAAGCATGGCACAGAAGGAACCCCGGACTATTAAGATATCACTTCCTGGAGGCCAGAA AATTGATGCTGTGGCATGGAACACAACCCCCTACCAACTAGCCCGGCAGATCAGTTCAACACTGGCAGATACTGC AGTGGCTGCTCAAGTGAATGGAGAACCTTATGATCTGGAGCGGCCCTTGGAGACAGATTCTGACCTCAGATTTCT GACATTCGATTCCCCAGAGGGGAAAGCAGTGTTCTGGCACTCCAGCACCCATGTCCTGGGGGCAGCAGCTGAACA ATTCCTAGGTGCTGTTCTCTGCAGAGGTCCAAGTACAGAATATGGCTTTTACCATGATTTCTTCCTGGGAAAGGA GAGGACAATCCGGGGCTCAGAGCTGCCTGTTTTGGAGCGGATTTGCCAGGAACTTACAGCTGCTGCTCGACCCTT GGAGAAAGTGACAGGTCCAACAGCAACAGTATATGGGTGTGGCACATTGGTTGACCTTTGCCAGGGCCCCCACCT TCGGCATACTGGACAGATTGGAGGACTGAAGCTGCTATCGAACTCATCATCCTTATGGAGGTCTTCAGGGGCCCC AGAGACACTGCAGAGAGTGTCAGGGATTTCCTTCCCCACAACAGAATTGCTGAGGGTCTGGGGAAGCATGGAGGGA GAGCTGCTTCTTCCTGCCACGAGGGACAAGGGTGTATAATGCACTAGTGGCGTTTATCAGGGCTGAGTATGCCCA TCGTGGTTTCTCCGAGGTGAAAACTCCCACACTGTTTTCTACGAAGCTCTGGGAACAGTCAGGGCACTGGGAGCA TTATCAGGAAGACATGTTTGCCGTGCAGCCCCCAGGCTCTGACAGGCCTCCCAGCTCCCAGAGTGACGATTCTAC CAGGCATATCACAGATACACTCGCCCTCAAGCCTATGAACTGCCCTGCACACTGCCTGATGTTCGCCCACCGGCC CAGATCCTGGCGGGAACTGCCCCTGCGACTAGCTGACTTTGGGGCTCTACACCGGGCCGAAGCCTCTGGTGGTCT GGGGGGACTGACCCGACTGCGGTGCTTCCAGCAGGATGACGCTCACATCTTCTGTACAACAGATCAGCTGGAAGC AGAGATCCAAAGCTGTCTTGATTTCCTCCGTTCCGTCTATGCCGTTCTTGGCTTCTCCTTCCGCCTGGCACTGTC CACCCGGCCATCTGGCTTCCTGGGGGACCCTTGCCTTTGGGACCAGGCCGAACAGGTCCTTAAACAGGCCCTGAA GGAATTTGGAGAACCCTGGGACCTCAACTCTGGAGATGGTGCCTTCTATGGACCTAAGATTGACGTGCACCTCCA CGATGCCCTGGGCCGGCCACATCAGTGTGGGACAATTCAGCTTGACTTCCAACTGCCCCTGAGATTTGACCTCCA GTATAAGGGGCAGGCGGGTGCCCTGGAGCGTCCAGTCCTCATTCACCGAGCAGTGCTCGGTTCTGTGGAAAGACT GTTGGGAGTGCTGGCAGAAAGCTGCGGGGGGAAATGGCCACTGTGGCTGTCCCCGTTCCAGGTGGTGATCCC TGTGGGGAGTGAGCAAGAGGAATACGCCAAAGAGGCACAGCAGAGCCTGCGGGCTGCAGGACTGGTCAGTGACCT GGATGCAGACTCTGGACTGACCCTCAGCCGGAGAATCCGCCGGGCCCAGCTTGCCCACTACAATTTTCAGTTTGT GGTTGGCCAGAAAGAGCAAAGTAAGAGAACAGTGAACATTCGGACTCGAGATAATCGTCGCCTTGGGGAGTGGGA AATGTGGAGCCCCCAGAACTTCAGAACTGTGTGGAGGCACATGTCTGCTCTCCTGAAAAGAGACTTGGTTTGGGG

MALYQRWRCLRLQGLQACRLHTAVVSTPPRWLAERLGLFEELWAAQVKRLASMAQKEPRTIKISLPGGQKIDAVA
WNTTPYQLARQISSTLADTAVAAQVNGEPYDLERPLETDSDLRFLTFDSPEGKAVFWHSSTHVLGAAAEQFLGAV
LCRGPSTEYGFYHDFFLGKERTIRGSELPVLERICQELTAAARPFRRLEASRDQLRQLFKDNPFKLHLIEEKVTG
PTATVYGCGTLVDLCQGPHLRHTGQIGGLKLLSNSSSLWRSSGAPETLQRVSGISFPTTELLRVWEAWREEAELR
DHRRIGKEQELFFFHELSPGSCFFLPRGTRVYNALVAFIRAEYAHRGFSEVKTPTLFSTKLWEQSGHWEHYQEDM
FAVQPPGSDRPPSSQSDDSTRHITDTLALKPMNCPAHCLMFAHRPRSWRELPLRLADFGALHRAEASGGLGGLTR
LRCFQQDDAHIFCTTDQLEAEIQSCLDFLRSVYAVLGFSFRLALSTRPSGFLGDPCLWDQAEQVLKQALKEFGEP
WDLNSGDGAFYGPKIDVHLHDALGRPHQCGTIQLDFQLPLRFDLQYKGQAGALERPVLIHRAVLGSVERLLGVLA
ESCGGKWPLWLSPFQVVVIPVGSEQEEYAKEAQQSLRAAGLVSDLDADSGLTLSRRIRRAQLAHYNFQFVVGQKE
QSKRTVNIRTRDNRRLGEWDLPEAVQRLVELQNTRVPNAEEIF

390/6881 FIGURE 360

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MSSQQQKQPCTPPPQLQQQQVKQPCQPPPQEPCIPKTKEPCHPKVPEPCHPKVPEPCQPKVPEPCHPKVPEPCPS IVTPAPAQQKTKQK

393/6881 FIGURE 363

ATGGTTCCCAGGGAGAGAGCTGCTCTTTCTTCCGAAGCTCTGGGAGCTGGCACAGCTGAGGACTTCCTTTTC TTAGCTCCACCTGGACAGTGGCAGTATGGCAGCCTCAGAAAGGGAATCTTTTGCTGTCACAGATCATCACAGGCA GGCCACAGGTTAAGGAGAAAGAAGCTCCCTGTGCATCCATGGAAAGGCTTTGGTGAGAAGATGCAAGTGGAGCTGT GGAACGAGGGAGAGCTGCTGCTCTTTCTTCCGAAGCTCTGGGAGCTGGCACAGCCCAGGACTTCCTTTGCTCA GTCTCCACCTGGACAGTGGCAGTATGGCAGCCTCAGAAAAGAAACTTTTTGCTGTCAGGGATCATCATGGGCAGA TTACTGGCTAAGGAGAAGAAGCTCCCTGTGTATCCATGGTAGGCTTTGATGAGAAGATGAAGGTGGAGCTGTGG AACGAGATACTTTATTCAGGGAGTGAAAGAAAAGTGACAATTGCACAGGTGGTAGAAGCTCATGCCCAGGTGAAA GACAGACACAGAACACATCAACAGAATTCTCTGATGGTTCCCAGGCACACAGCTGCAGCTCTTTCTGCTGAAGCT CTGGGAACTGACAAAGCCAAGGTTCCTTTGCTCAGTCTCCACCTGGACAGTGGCATCTCCACCTGGACAGTGGCA ATATGGCAGCCTCAGAAAGGAAACCTTTTGCTATCAGGGATCATCATGGGCAGATCACTGGCTAAGAGGAAAGAA GCTAACTGTGTATCCATGGTAGGCTTTGATGAGAAGATGCAGGTGAAGCTGTGGAACAAGTGCAGGCACCAGAGC AGCAGCAGCCCTAGTGCCCCCAGCATCTCAGACAGGCTCACTTTACAAGTTGAGGTGATGAACTTGAAGCTAAGA GTTCCTCACAGTCCAGGGAGTGAAAGGAAAGTGACAACTGCACAGGTGGTGGAAGCTCATGCCCAGGGGACAGAC GCTGGCACAGCCCAGGACTTCCTTTGCTCAGTCTCCACCTGGACAGTGGCAGTATGGCAGCCTCAAAAAGAAAAAC CTTTTGCTATCAGAGATCATCACAGGCCGATCACAGGCTAAGAGGAAAGAAGCTCCCTGTGTATCCCTGGATGGC TTTGATGAGAAGATGCAGGTGGAGCTGTGGAACGAGCATCAAATCAACATTCATAGGATTGGATCAACCAAACTT GCTGTATTCAGATTAAATTCAACATTTCAGGGCACAAAGAACAGAGGAACTCCAGGAAGCCGACTCACCAGGTTC TCCAAGGCAGATCGGTGCTTAGGAGACTATAATCCGTGTGGACAGCCACCTAGAAGCAAACTTCTGGCCATGGTA GCACAGACTGTGTCATCATTCCAGGTTCTGTGGCCAAGCCCCCCAAACAGGAATCACGTAGTGAAGTTCAAAGAA ACTTCCAAAAGGTGCAGCAAAAGAAAGAAAAGAAAACATAA

 ${\tt MTCKMSQLERNIETIINTFHQYSVKLGHPDTLNQGEFKELVRKDLQNFLKKENKNEKVIEHIMEDLDTNADKQLS} \\ {\tt FEEFIMLMARLTWASHEKMHEGDEGPGHHHKPGLGEGTP}$

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 ${\tt AAATAAATAGGGAAGATGGAGACACCTCTGGGGGTCCTCTGGGGTCAAATCCAGTGGTGGGTAATTGTACAATA} \\ {\tt AATTTTTTTTGGTCAAATTT}$

 ${\tt MACPLDQAIGLLVAIFHKYSGREGDKHTLSKKELKELIQKELTIGSKLQDAEIARLMEDLDRNKDQEVNFQEYVT} \\ {\tt FLGALALIYNEALKG}$

399/6881 FIGURE 369

 ${\tt MACPLEKALDVMVSTFHKYSGKEGDKFKLNKSELKELLTRELPSFLGKRTDEAAFQKLMSNLDSNRDNEVDFQEY} \\ {\tt CVFLSCIAMMCNEFFEGFPDKQPRKK}$

401/6881 FIGURE 371

 ${\tt MACPLEKALDVMVSTFHKYSGKEGDKFKLNKSELKELLTRELPSFLGKRTDEAAFQKLMSNLDSNRDNEVDFQEY} \\ {\tt CVFLSCIAMMCNEFFEGFPDKQPRKK}$

FIGURE 373

GGCAGAGAGAGAGTGCCTCTGGCTTCAGGAGTCCCGAGTCTAAGGAGGGAAACGACTCCTTCAGGGAGCTTCCTGC TCCTAGGCTGTAGCCATGGCTCCTGCCAGACTGCACAGGAGCCCCCATCTGCCAGCCGGTGCATGTGGCCCTGCT CCCCAGAGCCTGCGCAGATGCCATCAAAATGGGACTCTGGTCACCCTGTCATTTCCCTTCTGGCAGACACTAAAA TGGGGAGCCCTGCCCTCAGGGGGGTGTCCCAAGTGCCATCAGAGGAGGCTTGGTGACTCCCAGACACAAGGGAAG CTTTAGCGTCTGCCCTCAGGGTGAGATGGAGGTATCGCCTCCGGCCTCAGGGAACCACAGTCTGAGGGGAGATG CAGCCCTGCCTTCCCATTCAGAGAGGGGTTTTGTGAGGTGGCTTGGGGGCATAGGGCAGAAGTGGATCCTACAG GCTGAGCTAAGGCCCCAAGAGCCTCAGCAGTGTACCCATCACCTGGCACCTCTGCAGCCACAGATCCATGATGTG CAGTTCTCTGGAGCAGGCGCTGGCTGGTCACTACCTTCCACAAGTACTCCTGCCAAGAGGGCGACAAGTT CAAGCTGAGTAAGGGGGAAATGAAGGAACTTCTGCACAAGGAGCTGCCCAGCTTTGTGGGGGAGAAAGTGGATGA GGAGGGGCTGAAGAAGCTGATGGGCAGCCTGGATGAGAACAGTGACCAGCAGGTGGACTTCCAGGAGTATGCTGT TGACTTCCTGCCATGGATCTCTTGGGCCCAGGACTGTTGATGCCTTTGAGTTTTGTATTCAATAAACTTTTTTTG GCCTCCTGGATCCTGCTCCCTTCTGGGCTCTGACTCTCCTGGAAATCTCTCCAAGGCCAGAGCTATGCTTTAGGT CTCAATTTTGGAATTTCAAACACCAGCAAAAAATTGGAAATCGAGATAGGTTGCTGACTTTTATTTTGTCAAATA AAGATATTAAAAAAGGC

 ${\tt MGSELETAMETLINVFHAHSGKEGDKYKLSKKELKELLQTELSGFLDAQKDVDAVDKVMKELDENGDGEVDFQEY}\\ {\tt VVLVAALTVACNNFFWENS}$

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TCAGACAAGCACTGGACGTGGCGGCCATTTTGTTTTGGACACCGAGCAGGAGCTGGCGGCCGCTGCAGACGAAAG CATACTACCGCTTACGCATCTAACCAACCGCCCATCTAGCTAACCCGAGCCCCTCCACCGTCAACTCAGGTTCGG CCGGTCCCGGCCCGCCTGCCGGAGCCGTGGTGGCAGCCCCGGGAGGAGCACTGGCGTCTGTTTCCTTCGATTCT CGGGATTCGAAGATGGCTGCACAGTCAGCGCCGAAAGTTGTGCTAAAAAGCACCACCAAGATGTCTCTAAATGAG CGCTTTACTAATATGCTGAAGAACAAACAGCCGACGCCAGTGAATATTCGGGCTTCGATGCAGCAACAACAGCAG CTAGCCAGTGCCAGAAACAGAAGACTGGCCCAGCAGATGGAGAATAGACCCTCTGTCCAGGCAGCATTAAAACTT AAGCAGAGCTTAAAGCAGCGCCTGGGTAAGAGTAACATCCAGGCACGGTTAGGCCGACCCATAGGGGCCCTGGCC AGGGGAGCAATCGGAGGACGAGGCCTACCCATAATCCAGAGGAGGCTTGCCCAGAGGAGGACTACGTGGGGGACGT GCCACCAGAACCCTACTTAGGGGCGGGATGTCACTCCGAGGTCAAAACCTGCTCCGAGGTGGACGAGCCGTAGCT CCCCGAATGGGCTTAAGAAGAGGTGGTGTTCGAGGTCGTGGAGGTCCTGGGAGAGGGGGCCTAGGGCGTGGAGCT ATGGGTCGTGGCGGAATCGGTGGTAGAGGTCGGGGTATGATAGGTCGGGGAAGAGGGGGCTTTGGAGGCCGAGGC ${\tt CGAGGCCGTGGACGAGGGAGGGGGCCCTTGCTCGCCCTGTATTGACCAAGGAGCAGCTGGACAACCAATTGGAT}$ ${\tt AATGATTGAAGCCTGCCCATCCTCCCATGAGAGACTCTTGTTAGTCAACACATCTGTAAATAACCTTGAGATAAC}$ ${\tt CATTTAGTGTTCCTTTTACTTTTTGATACTGTGTTGTATGAAACCCTTTTGTCCTTTGATTTTGTT}$ $\tt TTTGTTTTTTAGGGGGGGGGGGTTTCCCCTCCTTTGCCCAGACTTCTCTTTGAACACAAATGCATTAGCCT$ $\tt TGTGGCTAGAACACCCTCTTCCTACCTCTGTCTCCCCTCACTTGTCATATGCTCTGACATGCTAACATTTCTTT$ $\tt CTGAAATAGGGTTCTGTTACATCCTCTTCGATAGCCTGTTTAAAATGTTTAGAAGGTCTGGAGCTCAAAAATGCG$ TTCTTCC

AGGGGTGACAGAGGCCGTGGTCGTGGTGGCCCTTTGGTTCCAGAGGAGGCCCAGGAGGAGGGTTCAGGCCCTTT GTACCACATATCCCATTTGACTTCTATTTGTTTACTTCTGGTTTAGTGTGAAATGGCCTTTCCCCGGGTCAA GCCAGCACCTGATGAAACTTCCTTCAGTGAGGCCTTGCTGAAGAGGGAATCAGGACCTGGCTCCCAATTCTGCTGA TGAAGTGCAAATTGAAGAAGTTCGACAGGTGGGATCCTATAAAAAGGGGACAATGACTACAGGACACAATGTGGC TGACCTGGTGGTGATACTCAAGATTCTGCCAACGTTGGAAGCTGTTGCTGCCCTGGGGAACAAAGTCGTGGAAAG CCTAAGAGCACAGGATCCTTCTGAAGTTTTAACCATGCTGACCAACGAAACTGGCTTTGAAATCAGTTCTTCTGA TGCTACAGTGAAGATTCTCATTACAACAGTGCCACCCAATCTTCGAAAACTGGATCCAGAACTCCATTTGGATAT ${\tt CAAAGTATTGCAGAGTGCCTTAGCAGCCATCCGACATGCCCGCTGGTTCGAGGAAAATGCTTCTCAGTCCACAGT}$ TAAAGTTCTCATCAGACTACTGAAGGACTTGAGGATTCGTTTTCCTGGCTTTGAGCCCCTCACACCCTGGATCCT TGACCTACTAGGCCATTATGCTGTGATGAACAACCCCACCAGACAGCCTTTGGCCCTAAACGTTGCATACAGGCG CTGCTTGCAGATTCTGGCTGCAGGACTGTTCCTGCCAGGTTCAGTGGGTATCACTGACCCCTGTGAGAGTGGCAA $\verb|CTTTAGAGTACACAGTCATGACCCTAGAACAGCAGGACATGGTCTGCTATACAGCTCAGACTCTCGTCCGAAT| \\$ CCTCTCACATGGTGGCTTTAGGAAGATCCTTGGCCAGGAGGGTGATGCCAGCTATCTTGCTTCTGAAATATCTAC CCGTGGGATAGGGAAGATAGCAGGAAGAAAGTAAACTCCATAGAAGTGTCATTCCACTGGGTTTTGATATTGGC CTATAATCTCCAACTCCTGAAAACCCCTCTCTCAACTAATACTTTGCTGTTGAAATGTTGTGAAATGTTAAGTGT CTGGAAATTTTTTTTTCTAAGAAAAACTATTAAAGTACTT

MRGDRGRGRGGRFGSRGGPGGGFRPFVPHIPFDFYLCEMAFPRVKPAPDETSFSEALLKRNQDLAPNSAEQASIL SLVTKINNVIDNLIVAPGTFEVQIEEVRQVGSYKKGTMTTGHNVADLVVILKILPTLEAVAALGNKVVESLRAQD PSEVLTMLTNETGFEISSSDATVKILITTVPPNLRKLDPELHLDIKVLQSALAAIRHARWFEENASQSTVKVLIR LLKDLRIRFPGFEPLTPWILDLLGHYAVMNNPTRQPLALNVAYRRCLQILAAGLFLPGSVGITDPCESGNFRVHT VMTLEQQDMVCYTAQTLVRILSHGGFRKILGQEGDASYLASEISTWDGVIVTPSEKAYEKPPEKKEGEEEEENTE EPPQGEEEESMETQE

GCCAGCGCACGCGCGCTCCCTGGAAGGAGAAGTCTCAGCTAGAACGAGCGGCCCTAGGTTTTCGGAAGGGAGGAT CAGGGATGTTTGCGAGCGGCTGGAACCAGACGGTGCCGATAGAGGAAGCGGGCTCCATGGCTGCCCTCCTGCTGC TGCCCCTGCTGCTGTTGCTACCGCTGCTGCTGAAGCTACACCTCTGGCCGCAGTTGCGCTGGCTTCCGGCGG ACTTGGCCTTTGCGGTGCGAGCTCTGTGCTGCAAAAGGGCTCTTCGAGCTCGCCGCCCTGGCCGCGGCTGCCGCCG CCTTTCTCATTCACGGCTCGCGGCGCTTTAGCTACTCAGAGGCGGAGGCGCGAGAGTAACAGGGCTGCACGCGCCT TCCTACGTGCGCTAGGCTGGGACTGGGGACCCGACGGCGACAGCGGCGAGGGGGAGCGCTGGAGAAGGCGAGC GGGCAGCGCGGGAGCCGGAGATGCAGCGGCCGGAAGCGGCGGGGGTTTGCCGGAGGGGACGGTGCCGCCAGAG GTGGAGGAGCCGCCCCCTCTGTCACCTGGAGCAACTGTGGCGCTGCTCCTCCCCGCTGGCCCAGAGTTTCTGT GGCTCTGGTTCGGGCTGGCCAAGGCCGGCCTGCGCACTGCCTTTGTGCCCACCGCCCTGCGCCGGGGCCCCCTGC TGCTGGCTGAAGTGTCCGCTGAAGTGGATGGGCCAGTGCCAGGATACCTCTCTCCCCCCAGAGCATAACAGACA $\tt CGTGCCTGTACATCTTCACCTCTGGCACCACGGGCCTCCCCAAGGCTGCTCGGATCAGTCATCTGAAGATCCTGC$ AATGCCAGGGCTTCTATCAGCTGTGTGTGTGTCCACCAGGAAGATGTGATCTACCTCGCCCTCCCACTCTACCACA TGTCCGGTTCCCTGCGGCATCGTGGGCTGCATGGGCCATTGGGGCCACAGTGGTGCTGAAATCCAAGTTCTCGG CTGGTCAGTTCTGGGAAGATTGCCAGCAGCACAGGGTGACGGTGTTCCAGTACATTGGGGAAGCTGTGCCGATACC TTGTCAACCAGCCCCGAGCAAGGCAGAACGTGGCCATAAGGTCCGGCTGGCAGTGGGCAGCGGGCTGCGCCCAG ATACCTGGGAGCGTTTTGTGCGGCGCTTCGGGCCCCTGCAGGTGCTGGAGACATATGGACTGACAGAGGGCAACG TGGCCACCATCAACTACACAGGACAGCGGGGCGCTGTGGGGCGTGCTTCCTGGCTTTACAAGCATATCTTCCCCT TCTCCTTGATTCGCTATGATGTCACCACAGGAGAGCCAATTCGGGACCCCCAGGGGCACTGTATGGCCACATCTC CAGGTGAGCCAGGGCTGCTGGTGGCCCCGGTAAGCCAGCAGTCCCCATTCCTGGGCTATGCTGGCGGGCCAGAGC TGGCCCAGGGGAAGTTGCTAAAGGATGTCTTCCGGCCTGGGGATGTTTTCTTCAACACTGGGGACCTGCTGGTCT GCGATGACCAAGGTTTTCTCCGCTTCCATGATCGTACTGGAGACACCTTCAGGTGGAAGGGGGAGAATGTGGCCA CAACCGAGGTGGCAGAGGTCTTCGAGGCCCTAGATTTTCTTCAGGAGGTGAACGTCTATGGAGTCACTGTGCCAG GGCATGAAGGCAGGGCTGGAATGGCAGCCCTAGTTCTGCGTCCCCCCCACGCTTTGGACCTTATGCAGCTCTACA CCCACGTGTCTGAGAACTTGCCACCTTATGCCCGGCCCCGATTCCTCAGGCTCCAGGAGTCTTTGGCCACCACAG AGACCTTCAAACAGCAGAAAGTTCGGATGGCAAATGAGGGCTTCGACCCCAGCACCCTGTCTGACCCACTGTACG TTCTGGACCAGGCTGTAGGTGCCTACCTGCCCCTCACAACTGCCCGGTACAGCGCCCTCCTGGCAGGAAACCTTC GAATC<u>TGA</u>GAACTTCCACACCTGAGGCACCTGAGAGAGGAACTCTGTGGGGTGGGGGCCGTTGCAGGTGTACTGG GCTGTCAGGGATCTTTTCTATACCAGAACTGCGGTCACTATTTTGTAATAAATGTGGCTGGAGCTGATCCAGCTG TCTCTGACCTACAAAAAAAAAAAAAAAAAA

410/6881 FIGURE 380

#11/6881 FIGURE 381

412/6881 FIGURE 382

 ${\tt MAGAGSAAVSGAGTPVAGPTGRDLFAEGLLEFLRPAVQQLDSHVHAVRESQVELREQIDNLATELCRINEDQKVALLDLDPYVKKLLNARRRVVLVNNILQNAQERLRRLNHSVAKETARRRAMLDSGIYPPGSPGK}$

CTATGATAAGCTAATTATTTATGTTTGCATAATATTTATGTTTGCATGTTAGTGACATATATTTTAAAATGTGAT CTTAGAATGCACCTCGGATCCCCCAAGGTTTAGGCTTTCTTCATTTGTCTTTGAAACTATATCTTCTGTCTCTTG TCATATCTGCTTATTGCGTGTTTTTCATACCTTCCACCTCTCTAAAAGCCGTTACCTGAGCCCTCGTTATCACTT TTGGTTGAATGTGCTGCACTTAGCTGCATTTCTAAGTTTCTGATTCTTGCAAGTTTGTGGAAACAGAGGAGTCTT TAACCCACATCAGCCTTGATCTAAGTGTACCACTTTACTTAAAAGTTCGTGGGATCTGGAGCTCCTGGTCTAGCA ACTAATATGCTGAAGAACAACAGCCGACGCCAGTGAATATTCGGGCTTCGATGCAGCAACAACAGCAGCTAGCC AGTGCCAGAAACAGAAGACTGGCCCAGCAGATGGAGAATAGACCCTCTGTCCAGGCAGCATTAAAACTTAAGCAG AGCTTAAAGCAGCGCCTGGGTAAGAGTAACATCCAGGCACGGTTAGGCCGACCCATAGGGGCCCTGGCCAGGGGA GCAATCGGAGGACGAGGCCTACCCATAATCCAGAGAGGCTTGCCCAGAGGAGGACTACGTGGGGGACGTGCCACC AGAACCCTACTTAGGGGCGGGATGTCACTCCGAGGTCAAAACCTGCTCCGAGGTGGACGAGCCGTAGCTCCCCGA ATGGGCTTAAGAAGAGGTGGTGTTCGAGGTCGTGGAGGTCCTGGGAGAGGGGGCCTAGGGCGTGGAGCTATGGGT CGTGGCGGAATCGGTGGTAGAGGTCGGGGTATGATAGGTCGGGGAAGAGGGGGCCTTTGGAGGCCGAGGCCGAGGC CGTGGACGAGGGAGAGGTGCCCTTGCTCGCCCTGTATTGACCAAGGAGCAGCTGGACAACCAATTGGATGCATAT TGAAGCCTGCCCATCCCCCATGAGAGACTCTTGTTAGTCAACACATCTGTAAATAACCTTGAGATAACAGATGA TTTTTAGGGGGGGGGGGGTTTCCCCTCCTTTGCCCAGACTTCTCTTTGAACACAAATGCATTAGCCTTGTGGC TAGAACACCCTCTTCCTACCTCTGTCTCCCCTCACTTGTCATATGCTCTGACATGCTAACATTTCTTTTGTTCAT TAGGGTTCTGTTACATCCTCTTCGATAGCCTGTTTAAAATGTTTAGAAGGTCTGGAGCTCAAAAATGCGTTCTTC C

414/6881 FIGURE 384

415/6881 FIGURE 385

 ${\tt MMCSSLEQALAVLVTTFHKYSCQEGDKFKLSKGEMKELLHKELPSFVGEKVDEEGLKKLMGSLDENSDQQVDFQE} \\ {\tt YAVFLALITVMCNDFFQGCPDRP}$

GCGCCCAGACTTGCTGCCGGGCTGGACGGTCCGCACGGTGCTGGGCAGCAGCGAAAACGCGCTGGGCGTGTGCTC CGACACCGCAGCGCCCTGGCCGCGGTGGACCTCAAGTGGGAGCACAACCCCGCTGTGTTCCTGGGCCCCGGCTG CGTGTACGCCGCCCCAGTGGGGCGCTTCACCGCGCACTGGCGGGTCCCGCTGCTGACCGCCGCGCCCCCGGC GCTGGGCTTCGGTGTCAAGGACGAGTATGCGCTGACCACCCGCGGGGGCCCAGCTACGCCAAGCTGGGGGACTT AGAGCACTGCTTCTTCCTCGTGGAGGGGCTGTTCATGCGGGTCCGCGACCGCCTCAATATTACGGTGGACCACCT GGAGTTCGCCGAGGACGACCTCAGCCACTACACCAGGCTGCTGCGGACCATGCCGCGCAAAGGCCGAGTTATCTA CATCTGCAGCTCCCCTGATGCCTTCAGAACCCTCATGCTCCTGGCCCTGGAAGCTGGCTTGTGTGGGGAGGACTA CGTTTTCTTCCACCTGGATATCTTTGGGCAAAGCCTGCAAGGTGGACAGGGCCCTGCTCCCCGCAGGCCCTGGGA GAGAGGGGATGGCCAGTGCCCGCCAGGCCTTTCAGGCTGCCAAAATCATTACATATAAAGACCCAGA TAATCCCGAGTACTTGGAATTCCTGAAGCAGTTAAAACACCTGGCCTATGAGCAGTTCAACTTCACCATGGAGGA TGGCCTGGTGAACACCATCCCAGCATCCTTCCACGACGGGCTCCTGCTCTATATCCAGGCAGTGACGGAGACTCT GGCACATGGGGGAACTGTTACTGATGGGGAGAACATCACTCAGCGGATGTGGAACCGAAGCTTTCAAGGTGTGAC AGGATACCTGAAAATTGATAGCAGTGGCGATCGGGAAACAGACTTCTCCCTCTGGGATATGGATCCCGAGAATGG TGCCTTCAGGGTTGTACTGAACTACAATGGGACTTCCCAAGAGCTGGTGGCTGTTCGGGGGCGCAAACTGAACTG GCCCCTGGGGTACCCTCCTCCTGACATCCCCAAATGTGGCTTTGACAACGAAGACCCAGCATGCAACCAAGATCA CCTTTCCACCCTGGAGGTGCTGGCTTTGGTGGGCAGCCTCTCCTTGCTCGGCATTCTGATTGTCTCCTTCAT ATACAGGAAGATGCAGCTGGAGAAGGAACTGGCCTCGGAGCTGTGGCGGTGCGCTGGGAGGACGTTGAGCCCAG TAGCCTTGAGAGGCACCTGCGGAGTGCAGGCAGCCGGCTGACCCTGAGCGGGAGAGGCTCCAATTACGGCTCCCT GCTAACCACAGAGGGCCAGTTCCAAGTCTTTGCCAAGACAGCATATTATAAGGGCAACCTCGTGGCTGTAAACG TGTGAACCGTAAACGCATTGAGCTGACACGAAAAGTCCTGTTTGAACTGAAGCATATGCGGGATGTGCAGAATGA ACACCTGACCAGGTTTGTGGGAGCCTGCACCGACCCCCAATATCTGCATCCTCACAGAGTACTGTCCCCGTGG GAGCCTGCAGGACATTCTGGAGAATGAGAGCATCACCCTGGACTGGATGTTCCGGTACTCACCCAATGACAT CGTCAAGGGCATGCTGTTTCTACACAATGGGGCTATCTGTTCCCATGGGAACCTCAAGTCATCCAACTGCGTGGT AGATGGGCGCTTTGTGCTCAAGATCACCGACTATGGGCTGGAGGCTTCAGGGACCTGGACCCAGAGCAAGGACA CACCGTTTATGCCAAAAAGCTGTGGACGGCCCCTGAGCTCCTGCGAATGGCTTCACCCCCTGTGCGGGGCTCCCA GGCTGGTGACGTATACAGCTTTGGGATCATCCTTCAGGAGATTGCCCTGAGGAGTGGGGTCTTCCACGTGGAAGG CCTGCAGAGTCACCTGGAGGAGTTGGGGCTGCTCATGCAGCGGTGCTGGGCTGAGGACCCACAGGAGAGGCCACC ATTCCAGCAGATCCGCCTGACGTTGCGCAAATTTAACAGGGAGAACAGCAGCAACATCCTGGACAACCTGCTGTC CCGCATGGAGCAGTACGCGAACAATCTGGAGGAACTGGTGGAGGAGCGGACCCAGGCATACCTGGAGGAGAAGCG GGCCGAAGCCTTTGACAGTGTTACCATCTACTTCAGTGACATTGTGGGTTTCACAGCGCTGTCGGCGGAGAGCAC ACCCATGCAGGTGGTGACCCTGCTCAATGACCTGTACACTTGCTTTGATGCTGTCATAGACAACTTTGATGTGTA CAAGGTGGAGACAATTGGCGATGCCTACATGGTGGTGTCAGGGCTCCCTGTGCGGAACGGGCGGCTACACGCCTG CGAGGTAGCCCGCATGGCCCTGGCACTGCTGGATGCTGTGCGCTCCTTCCGAATCCGCCACCGGCCCCAGGAGCA TCTCTTTGGGGATACAGTCAACACGCCTCAAGAATGGAGTCTAATGGGGAAGCCCTGAAGATCCACTTGTCTTC TGAGACCAAGGCTGTCCTGGAGGAGTTTGGTGGTTTCGAGCTGGAGCTTCGAGGGGATGTAGAAATGAAGGGCAA CCCTCCACACCTCCCTACCCTGTGCCAGAAGCAACAGAGGTGCCAGGCCTCAGCCTCACCCACAGCAGCCCCATC GCCAAAGGATGGAAGTAATTTGAATAGCTCAGGTGTGCTGACCCCAGTGAAGACACCAGATAGGACCTCTGAGAG GGGACTGGCATGGGGGGATCTCAGAGCTTACAGGCTGAGCCCAAGCCCACGGCCATGCACAGGGACACTCACACAG GCACACGCACCTGCTCTCCACCTGGACTCAGGCCGGGCTGGGCTGTGGATTCCTGATCCCCTCCCCATGC TCTCCTCCCTCAGCCTTGCTACCCTGTGACTTACTGGGAGGAGAAAGAGTCACCTGAAGGGGAACATGAAAAGAG ACTAGGTGAAGAGAGGGCAGGGGAGCCCACATCTGGGGCCCGCCACAATACCTGCTCCCCCGACCCCCTCCACC CAGCAGTAGACACAGTGCACAGGGGAGAAGAGGGTTGGCGCAGAAGGGTTGGGGGGCCTGTATGCCTTCTAC CATGAGCAGAGACAATTAAAATCTTTATTCCAGTG

MPGPRRPAGSRLRLLLLLLLPPLLLLRGSHAGNLTVAVVLPLANTSYPWSWARVGPAVELALAQVKARPDLLPG
WTVRTVLGSSENALGVCSDTAAPLAAVDLKWEHNPAVFLGPGCVYAAAPVGRFTAHWRVPLLTAGAPALGFGVKD
EYALTTRAGPSYAKLGDFVAALHRRLGWERQALMLYAYRPGDEEHCFFLVEGLFMRVRDRLNITVDHLEFAEDDL
SHYTRLLRTMPRKGRVIYICSSPDAFRTLMLLALEAGLCGEDYVFFHLDIFGQSLQGGQGPAPRRPWERGDGQDV
SARQAFQAAKIITYKDPDNPEYLEFLKQLKHLAYEQFNFTMEDGLVNTIPASFHDGLLLYIQAVTETLAHGGTVT
DGENITQRMWNRSFQGVTGYLKIDSSGDRETDFSLWDMDPENGAFRVVLNYNGTSQELVAVSGRKLNWPLGYPPP
DIPKCGFDNEDPACNQDHLSTLEVLALVGSLSLLGILIVSFFIYRKMQLEKELASELWRVRWEDVEPSSLERHLR
SAGSRLTLSGRGSNYGSLLTTEGQFQVFAKTAYYKGNLVAVKRVNRKRIELTRKVLFELKHMRDVQNEHLTRFVG
ACTDPPNICILTEYCPRGSLQDILENESITLDWMFRYSLTNDIVKGMLFLHNGAICSHGNLKSSNCVVDGRFVLK
ITDYGLESFRDLDPEQGHTVYAKKLWTAPELLRMASPPVRGSQAGDVYSFGIILQEIALRSGVFHVEGLDLSPKE
IIERVTRGEQPPFRPSLALQSHLEELGLLMQRCWAEDPQERPPFQQIRLTLRKFNRENSSNILDNLLSRMEQYAN
NLEELVEERTQAYLEEKRKAEALLYQILPHSVAEQLKRGETVQAEAFDSVTIYFSDIVGFTALSAESTPMQVVTL
LNDLYTCFDAVIDNFDVYKVETIGDAYMVVSGLPVRNGRLHACEVARMALALLDAVRSFRIRHRPQEQLRLRIGI
HTGPVCAGVVGLKMPRYCLFGDTVNTASRMESNGEALKIHLSSETKAVLEEFGGFELELRGDVEMKGKGKVRTYW
LLGERGSSTRG

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TTGCCCGGGACTAGGAGCTTAAGTGAAGAGGTACGCCTTGTTCGGTGGAAATCAGCCGTAGCCATGAGTTTCTGC CTCCTACATCTGGGCCCGCTTTAGGGGGCTTGTTCGCTTCTCTCCCTGCGCCCAAGGGTCCGGCCTTGCTGCCTC AGCCTCCTCCCCCTTGCCCTTCGGCCTGGGAGGCTTCCCCCCACCTCCAGGCGTGAGCCCGGCTGAAGCGGCGG GAGTTGGGGAGGGACTGGGATTGGGGTTGCCCTCGCCCCGAGGCCCTGGCCTCAATCTGCCCCCTCCAATTGGCG GTGCCGGTCCCCCGCTGGGGCTTCCCAAGCCAAAGAAGAGAGGGAAAGAGCCCGTGAAGATCGCGGCGCCGGAGTTGC ATAAGGGAGATTCAGATTCTGAGGAAGATGAACCCACAAAGAAGAAAACTATCCTTCAGGGATCCAGTGAGGGGA CTGGTTTGTCTGCCTTGCTTCCCCAACCTAAAAACCTGACTGTGAAAGAGACTAACAGGTTGCTCCTGCCCCATG CCTTCTCCCGCAAACCCTCGGATGGCTCCCCTGATACTAAGCCCTCCAGACTGGCTTCTAAGACCAAGACTTCCT CTCTTGCCCCTGTTGTGGGCACCACAACCACCACTCCGTCGCCCTCTGCTATCAAGGCTGCTGCCAAGAGTGCTG CCCTGCAGGTGACAAAGCAGATCACGCAGGAAGAAGACGACAGTGATGAGGAAGTAGCCCCCGAAAACTTTTTCT CCCTCCCTGAAAAGGCTGAGCCACCTGGAGTTGAGCCATACCCTTACCCCATCCCCACTGTCCCTGAAGAGCTGC CTCCAGGCACGGAACCAGAGCCGGCTTTCCAGGACGATGCAGCCAATGCCCCCCTTGAATTCAAGATGGCAGCAG GTTCAAGTGGGGCCCCTTGGATGCCTAAGCCTGGGGACGACTACAGCTACAATCAGTTTTCCACATATGGCGATG CCACCCAGGAAATTGCCCCAGATGCCTCCTTCATCGATGACGAAGCATTTAAGCGGCTGCAGGGCAAGAGGAACC GAGGGAGAAAAATCAACTTTGTGGAGATCAAAGGTGATGACCAGCTCAGTGGGGCCCAGCAATGGATGACTA GGAAACACCAGATCACATATCTTATTCATCAGGCCAAGGAGCGGGAGCTGGAACTGAAGAACACCTGGTCAGAGA ${\tt ACAAGCTCAGCCGCCGTCAGACCCAAGCCAAATATGGATTC} \underline{{\tt TAG}} {\tt GGCTCTGGAACTGATTGCTCCCAGGATCTCC}$ TGCCAGCCCAGCTGGCCCCAGCTTCACCTCTGGGACCCCAGCTGCTCTAAGCCCAGGATCTCTTTCCCC AAGGACCCAGCCCTCGCCTCTGCGAGAATGAACATATTTGATAGATTTTCTTAACAAGTTAGAAAATTCAGCTC CTTTCTGTCCTGGAGCTAGCAAAGACTTGTGTGATGCCTCCGAAGGGGCTCTGAGTTCTGGGGTGGGAGTTTTGC

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MSLVAYASSDESEPDEAEPEPEEEEAVAPTSGPALGGLFASLPAPKGPALLPPPPQMLAPAFPPPLLLPPPTGDP
RLQPPPPLPFGLGGFPPPPGVSPAEAAGVGEGLGLGLPSPRGPGLNLPPPIGGAGPPLGLPKPKKRKEPVKIAAP
ELHKGDSDSEEDEPTKKKTILQGSSEGTGLSALLPQPKNLTVKETNRLLLPHAFSRKPSDGSPDTKPSRLASKTK
TSSLAPVVGTTTTTPSPSAIKAAAKSAALQVTKQITQEEDDSDEEVAPENFFSLPEKAEPPGVEPYPYPIPTVPE
ELPPGTEPEPAFQDDAANAPLEFKMAAGSSGAPWMPKPGDDYSYNQFSTYGDANAAGAYYQDYYSGGYYPAQDPA
LVPTQEIAPDASFIDDEAFKRLQGKRNRGREEINFVEIKGDDQLSGAQQWMTKSLTEEKTMKSFSKKKGEQPTGQ
QRRKHQITYLIHQAKERELELKNTWSENKLSRRQTQAKYGF

421/6881 FIGURE 391

GAGGAGGAGTGGGGACCGGGGGGGGGGGGGGAGGAAGAGGCCTCGCGCAGAGGAGGAGGAATTGAATTTCAAACA GAGCGGAGCGCCGCCACCGCCGCACGCGCAAACTTGGGCTCGCGCTTCCCGGCCCGGCGCGCGGAGCCCGGGGG GCCCGGAGCCCCGCCATGTCGCGATCCAACCGGCAGAAGGAGTACAAATGCGGGGACCTGGTGTTCGCCAAGATG AAGGGCTACCCACACTGGCCGGCCCGGATTGACGAGATGCCTGAGGCTGCCGTGAAATCAACAGCCAACAAATAC CAAGTCTTTTTTTCGGGACCCACGAGACGCATTCCTGGGCCCCAAAGACCTCTTCCCTTACGAGGAATCCAAG GAGAAGTTTGGCAAGCCCAACAAGAGGAAAGGGTTCAGCGAGGGGCTGTGGGAGATCGAGAACAACCCTACTGTC AAGGCTTCCGGCTATCAGTCCTCCCAGAAAAAGAGCTGTGTGGAAGAGCCTGAACCAGAGCCCGAAGCTGCAGAG AAGGAGAAGAACGAGAAAGGAGCGTTGAAGAGGAGGAGCAGGGGACTTGCTGGAGGACTCTCCTAAACGTCCCAAG GAGGCAGAAAACCCTGAAGGAGGAGGAGGAGGAGGCAGCCACCTTGGAGGTTGAGAGGCCCCTTCCTATGGAGGTG GAAAAGAATAGCACCCCTCTGAGCCCGGCTCTGGCCGGGGGCCTCCCCAAGAGGAAGAAGAAGAGGAGGATGAA GAGGAAGAGGCTACCAAGGAAGATGCTGAGGCCCCAGGCATCAGAGATCATGAGAGCCTGTAGCCACCAATGTTT CAAGAGGAGCCCCCACCCTGTTCCTGCTGTCTGGGTGCTACTGGGGAAACTGGCCATGGCCTGCAAACTGGG AACCCCTTTCCCACCCCAACCTGCTCTCCTCTTCTACTCACTTTTCCCACTCCAAGCCCAGCCCATGGAGATTGA CCTGGATGGGGCAGCCACCTGGCTCTCACCTCTAGGTCCCCATACTCCTATGATCTGAGTCAGAGCCATGTCTT CTCCCTGGAATGAGTTGAGGCCACTGTGTTCCTTCCGCTTGGGAGGGGCAATCCTCAAATGCGGGGTGGGGGCAG CACAGGAGGCGCCTCCTTCTGAGCTCCTGTCCCCTGCTACACCTATTATCCCAGCTGCCTAGATTCAGGGAAA GTGGGACAGCTTGTAGGGGAGGGGCTCCTTTCCATAAATCCTTGATGATTGACAACACCCCATTTTTCCTTTTGCC GACCCCAAGAGTTTTGGGAGTTGTAGTTAATCATCAAGAGAATTTGGGGCCTTCCAAGTTGTTCGGGCCAAGGACC TGAGACCTGAAGGGTTGACTTTACCCATTTGGGTGGGAGTGTTGAGCATCTGTCCCCCTTTAGATCTCTGAAGCC ACAAATAGGATGCTTGGGAAGACTCCTAGCTGTCCTTTTTCCTCTCCACACAGTGCTCAAGGCCAGCTTATAGTC ATATATATCACCCAGACATAAAGGAAAAGACACATTTTTTAGGAAATGTTTTTAATAAAAGAAAATTACAAAAAA AAATTTTAAAGACCCCTAACCCTTTGTGTGCTCTCCATTCTGCTCCTTCCCCATCGTTGCCCCCATTTCTGAGGT TGTCATTTCTCATCCACATACCCTGACCTGGCCCCCTCAGTGTTGTCACCAGATCTGATTTGTAACCCACTGAGA GGACAGAGAAAATAAGTGCCCTCTCCCACCCTCTTCCTACTGGTCTCTATGCCTCTTCTACAGTCTCGTCTCT TTTACCCTGGCCCCTCTCCCTTGGGCTCTGATGAAAAATTGCTGACTGTAGCTTTGGAAGTTTAGCTCTGAGAAC CGTAGATGATTTCAGTTCTAGGAAAATAAAACCCGTTGATTACT

MPNFSGNWKIIRSENFEELLKVLGVNVMLRKIAVAAASKPAVEIKQEGDTFYIKTSTTVRTTEINFKVGEEFEEQ TVDGRPCKSLVKWESENKMVCEQKLLKGEGPKTSWTRELTNDGELILŢMTADDVVCTRVYVRE

GCAGTCTCCGCCGCAGTCTCAGCTGCAGCTGCAGGACTGAGCCGTGCACCCGGAGGAGACCCCCGGAGGAGGCGA GGCAGCCCTGGTCCTGGCCCAGGCTCCTGCAGCTTTAGCAGATGTTCTGGAAGGAGACAGCTCAGAGGACCGCGC TTTTCGCGTGCGCATCGCGGGCGACGCCACTGCAGGGCGTGCTCGGCGGCGCCCTCACCATCCCTTGCCACGT $\verb|CCACTACCTGCGGCCACCGCCGGGCGGGCTGTGCTGGGCTCTCCGCGGGTCAAGTGGACTTTCCTGTCCCG| \\$ GGGCCGGGAGGCAGAGGTGCTGGTGGCGCGGGGAGTGCGCGTCAAGGTGAACGAGGCCTACCGGTTCCGCGTGGC $\verb|CTATCGCTGTGAGGTCCAGCACGGCATCGATGACAGCAGCGACGCTGTGGAGGTCAAAGGGGTCGTCTT| \\$ TCTCTACCGAGAGGGCTCTGCCCGCTATGCTTTCTCCTTTTCTGGGGCCCAGGAGGCCTGTGCCCGCATTGGAGC $\verb|CCGGAACTATGGTGTGGTGGACCCGGATGACCTCTATGATGTGTACTGTTATGCTGAAGACCTAAATGGAGAACT| \\$ GTTCCTGGGTGACCCTCCAGAGAAGCTGACATTGGAGGAAGCACGGGCGTACTGCCAGGAGCGGGGTGCAGAGAT TGCCACCACGGGCCAACTGTATGCAGCCTGGGATGGTGGCCTGGACCACTGCAGCCCAGGGTGGCTAGCTGATGG CAGTGTGCGCTACCCCATCGTCACACCCAGCCAGCCGTGTGGTGGGGGGCTTGCCTGGTGTCAAGACTCTCTTCCT CTTCCCCAACCAGACTGGCTTCCCCAATAAGCACAGCCGCTTCAACGTCTACTGCTTCCGAGACTCGGCCCAGCC TTCTGCCATCCTGAGGCCTCCAACCCAGCCTCCAACCCAGCCTCTGATGGACTAGAGGCTATCGTCACAGTGAC AGAGACCCTGGAGGAACTGCAGCTGCCTCAGGAAGCCACAGAGAGTGAATCCCGTGGGGCCATCTACTCCATCCC CATCATGGAGGACGGAGGGGGAGCTCCACTCCAGAAGACCCAGCAGAGGCCCCTAGGACGCTCCTAGAATT TGAAACACAATCCATGGTACCGCCCACGGGGTTCTCAGAAGAGGAAGGTAAGGCATTGGAGGAAGAAGAAAATA CGAGCTCAGCAGCCCGGGCCCTGAGGCCTCTCTCCCCACTGAGCCAGCAGCCCAGGAGAAGTCACTCTCCCAGGC GCCAGCAAGGGCAGTCCTGCAGCCTGGTGCATCACCACTTCCTGATGGAGAGTCAGAAGCTTCCAGGCCTCCAAG GGTCCATGGACCACCTACTGAGACTCTGCCCACTCCCAGGGAGAGGAACCTAGCATCCCCATCACCTTCCACTCT GACAGGAAGCTCCGAGGGTGCCCCTTCCCTGCTTCCAGCCACACGGGCCCCTGAGGGTACCAGGGAGCTGGAGGC CAGCGCCAGCCGAGGTGGAGTGGCCGTGGTCCCCGCATCAGGTGACTGTGTCCCCAGCCCCTGCCACAATGGTGG CCTCCGCTTCTGCAACCCCGGCTGGGACGCCTTCCAGGGCGCCTGCTACAAGCACTTTTCCACACGAAGGAGCTG GGAGGAGGCAGAGACCCAGTGCCGGATGTACGGCGCGCATCTGGCCAGCATCAGCACACCCGAGGAACAGGACTT CATCAACAACCGGTACCGGGAGTACCAGTGGATCGGACTCAACGACAGGACCATCGAAGGCGACTTCTTGTGGTC GGATGGCGTCCCCTGCTCTATGAGAACTGGAACCCTGGGCAGCCTGACAGCTACTTCCTGTCTGGAGAACTG CGTGGTCATGGTGTGGCATGATCAGGGACAATGGAGTGACGTGCCCTGCAACTACCACCTGTCCTACACCTGCAA GATGGGGCTGGTGTCCTGTGGGCCGCCACCGGAGCTGCCCCTGGCTCAAGTGTTCGGCCGCCCACGGCTGCGCTA TGAGGTGGACACTGTGCTTCGCTACCGGTGCCGGGAAGGACTGGCCCAGCGCAATCTGCCGCTGATCCGATGCCA AGAGAACGGTCGTTGGGAGGCCCCCAGATCTCCTGTGTGCCCAGAAGACCTGCCCGAGCTCTGCACCCAGAGGA GGACCCAGAAGGACGTCAGGGGAGGCTACTGGGACGCTGGAAGGCGCTGTTGATCCCCCCTTCCAGCCCCATGCC AGGTCCC<u>TAG</u>GGGGCAAGGCCTTGAACACTGCCGGCCACAGCACTGCCCTGTCACCCAAATTTTCCCTCACACCC TGCGCTCCCGCCACCACAGGAAGTGACAACATGACGAGGGGTGGTGCTGGAGTCCAGGTGACAGTTCCTGAAGGG CAGGGCCGGAGTAAATCCCTAAGTGCCTCAACTGCCCTCTCCCTGGCAGCCATCTTGTCCCCTCTATTCCTCTAG GGAGCACTGTGCCCACTCTTTCTGGGTTTTCCAAGGGAATGGGCTTGCAGGATGGAGTGTCTGTAAAATCAACAG

MAQLFLPLLAALVLAQAPAALADVLEGDSSEDRAFRVRIAGDAPLQGVLGGALTIPCHVHYLRPPPSRRAVLGSP
RVKWTFLSRGREAEVLVARGVRVKVNEAYRFRVALPAYPASLTDVSLALSELRPNDSGIYRCEVQHGIDDSSDAV
EVKVKGVVFLYREGSARYAFSFSGAQEACARIGAHIATPEQLYAAYLGGYEQCDAGWLSDQTVRYPIQTPREACY
GDMDGFPGVRNYGVVDPDDLYDVYCYAEDLNGELFLGDPPEKLTLEEARAYCQERGAEIATTGQLYAAWDGGLDH
CSPGWLADGSVRYPIVTPSQRCGGGLPGVKTLFLFPNQTGFPNKHSRFNVYCFRDSAQPSAIPEASNPASNPASD
GLEAIVTVTETLEELQLPQEATESESRGAIYSIPIMEDGGGGSSTPEDPAEAPRTLLEFETQSMVPPTGFSEEEG
KALEEEEKYEDEEEKEEEEEEEEVEDEALWAWPSELSSPGPEASLPTEPAAQEKSLSQAPARAVLQPGASPLPDG
ESEASRPPRVHGPPTETLPTPRERNLASPSPSTLVEAREVGEATGGPELSGVPRGESEETGSSEGAPSLLPATRA
PEGTRELEAPSEDNSGRTAPAGTSVQAQPVLPTDSASRGGVAVVPASGDCVPSPCHNGGTCLEEEEGVRCLCLPG
YGGDLCDVGLRFCNPGWDAFQGACYKHFSTRRSWEEAETQCRMYGAHLASISTPEEQDFINNRYREYQWIGLNDR
TIEGDFLWSDGVPLLYENWNPGQPDSYFLSGENCVVMVWHDQGQWSDVPCNYHLSYTCKMGLVSCGPPPELPLAQ
VFGRPRLRYEVDTVLRYRCREGLAQRNLPLIRCQENGRWEAPQISCVPRRPARALHPEEDPEGRQGRLLGRWKAL
LIPPSSPMPGP

426/6881 FIGURE 396

427/6881 FIGURE 397

 ${\tt MFLTEDLITFNLRNFLLFQLWESSFSPGAGGFCTTLPPSFLRVDDRATSSTTDSSRAPSSPRPPGSTSHCGISTRCERCLCVLPLRTSQVPDVMAPQHDQEKFHDLAYSCLGKSFSMSNQDLYGYSTSSLALGLAWLSWETKKKNVLHLVGLDSL$

428/6881 FIGURE 398

TTGCGTAGGGGGCGGACTAAGGCTGTCAATTGGTCTGTTTTTTGTGCCGATCAATGAGATGGGTGCGGTGATTGG TCTCTCCAGAAGGTTCTGCCGGTTCCCCCAGCTCTGGGTACCCGGCTCTGCATCGCGTCGCCATGATGGGCCCATC GTCCAGTGCTCGTGCTCAGCCAGAACACAAAGCGTGAATCCGGAAGAAAAGTTCAATCTGGAAACATCAATGCTG CCAAGACTATTGCAGATATCATCCGAACATGTTTGGGACCCAAGTCCATGATGAAGATGCTTTTGGACCCAATGG GAGGCATTGTGATGACCAATGATGGCAATGCCATTCTTCGAGAGATTCAAGTCCAGCATCCAGCGGCCAAGTCCA TGATCGAAATTAGCCGGACCCAGGATGAAGAGGTTGGAGATGGGACCACATCAGTAATTATTCTTGCAGGGGAAA TGCTGTCTGTAGCTGAGCACTTCCTGGAGCAGCAGATGCACCCAACAGTGGTGATCAGTGCTTACCGCAAGGCAT TGGATGATATGATCAGCACCCTAAAGAAAATAAGTATCCCAGTCGACATCAGTGACAGTGATATGATGCTGAACA TCATCAACAGCTCTATTACTACCAAAGCCATCAGTCGGTGGTCATCTTTGGCTTGCAACATTGCCCTGGATGCTG TCAAGATGGTACAGTTTGAGGAGAATGGTCGGAAAGAGATTGACATAAAAAAATATGCAAGAGTGGAAAAGATAC CTGGAGGCATCATTGAAGACTCCTGTGTCTTGCGTGGAGTCATGATTAACAAGGATGTGACCCATCCACGTATGC GGCGCTATATCAAGAACCCTCGCATTGTGCTGCTGGATTCTTCTCTGGAATACAAGAAAGGAAAGCCAGACTG ACATTGAGATTACACGAGAGGAGGACTTCACCCGAATTCTCCAGATGGAGGAAGAGTACATCCAGCAGCTCTGTG AGGACATTATCCAACTGAAGCCCGATGTGGTCATCACTGAAAAGGGCATCTCAGATTTAGCTCAGCACTACCTTA GGATAGTCAGCCGACCAGAGGAACTGAGAGAAGATGATGTTGGAACAGGAGCAGGCCTGTTGGAAATCAAGAAAA TTGGAGATGAATACTTTACTTTCATCACTGACTGCAAAGACCCCAAGGCCTGCACCATTCTCCTCCGGGGGGCTA GCAAAGAGATTCTCTCGGAAGTAGAACGCAACCTCCAGGATGCCATGCAAGTGTGTCGCAATGTTCTCCTGGACC CTCAGCTGGTGCCAGGGGGTGGGGCCTCCGAGATGGCTGTGGCCCATGCCTTGACAGAAAAATCCAAGGCCATGA CTGGTGTGGAACAATGGCCATACAGGGCTGTTGCCCAGGCCCTAGAGGTCATTCCTCGTACCCTGATCCAGAACT GTGGGGCCAGCACCATCCGTCTACTTACCTCCCTTCGGGCCAAGCACCCCAGGAGAACTGTGAGACCTGGGGTG TANATGGTGAGACGGGTACTTTGGTGGACATGAAGGAACTGGGCATATGGGAGCCATTGGCTGTGAAGCTGCAGA ACAGAACCAGCAGAGTCTCCCCTTTTCCTGAGCCAGAGTGCCAGGAACACTGTGGACGTCTTTGTTCAGAAGGGA TCAGGTTGGGGGGCAGCCCCAGTCCCTTTCTGTCCCAGCTCAGTTTTCCAAAAGACACTGACATGTAATTCTTC TCTATTGTAAGGTTTCCATTTAGTTTGCTTCCGATGATTAAATCTAAGTCATTTG

MGHRPVLVLSQNTKRESGRKVQSGNINAAKTIADIIRTCLGPKSMMKMLLDPMGGIVMTNDGNAILREIQVQHPA
AKSMIEISRTQDEEVGDGTTSVIILAGEMLSVAEHFLEQQMHPTVVISAYRKALDDMISTLKKISIPVDISDSDM
MLNIINSSITTKAISRWSSLACNIALDAVKMVQFEENGRKEIDIKKYARVEKIPGGIIEDSCVLRGVMINKDVTH
PRMRRYIKNPRIVLLDSSLEYKKGESQTDIEITREEDFTRILQMEEEYIQQLCEDIIQLKPDVVITEKGISDLAQ
HYLMRANITAIRRVRKTDNNRIARACGARIVSRPEELREDDVGTGAGLLEIKKIGDEYFTFITDCKDPKACTILL
RGASKEILSEVERNLQDAMQVCRNVLLDPQLVPGGGASEMAVAHALTEKSKAMTGVEQWPYRAVAQALEVIPRTL
IQNCGASTIRLITSLRAKHTQENCETWGVNGETGTLVDMKELGIWEPLAVKLQTYKTAVETAVLLLRIDDIVSGH
KKKGDDQSRQGGAPDAGQE

GAATTGCGGCCGT<u>ATG</u>CGCGGCTCTGTGGAGTGCACCTGGGGTTGGGGGCACTGTGCCCCCAGCCCCCTGCTCCT TTGGACTCTACTTCTGTTTGCAGCCCCATTTGGCCTGCTGGGGGGAGAAGACCCCGCCAGGTGTCTCTGGAGGTCAT $\verb|CCCTAACTGGCCTGGGCCCCCTGCAGAACCTGCTTCATATACGGGCAGTGGGCACCAATTCCACACTGCACTATGT|\\$ GTGGAGCAGCCTGGGGCCTCTGGCAGTGGTAATGGTGGCCACCACACCCCCCACAGCACCCCTGAGCGTCAACTG GAGCCTCCTGCTATCCCCTGAGCCCGATGGGGGCCTGATGGTGCTCCCTAAGGACAGCATTCAGTTTTCTTCTGC CCTTGTTTTTACCAGGCTGCTTGAGTTTGACAGCACCAACGTGTCCGATACGGCAGCAAAGCCTTTGGGAAGACC ATATCCTCCATACTCCTTGGCCGATTTCTCTTGGAACAACATCACTGATTCATTGGATCCTGCCACCCTGAGTGC CACATTTCAAGGCCACCCCATGAACGACCCTACCAGGACTTTTGCCAATGGCAGCCTGGCCTTCAGGGTCCAGGC CTTTTCCAGGTCCAGCCGACCAGCCCAACCCCCTCGCCTCCTGCACACAGCAGACACCTGTCAGCTAGAGGTGGC CCTGATTGGAGCCTCTCCCCGGGGAAACCGTTCCCTGTTTGGGCTGGAGGTAGCCACATTGGGCCAGGGCCCTGA CTGCCCCTCAATGCAGGAGCAGCACTCCATCGACGATGAATATGCACCGGCCGTCTTCCAGTTGGACCAGCTACT GTGGGGCTCCCTCCCATCAGGCTTTGCACAGTGGCGACCAGTGGCTTACTCCCAGAAGCCGGGGGGCCGAGAATC AGCCCTGCCCAGCCTCCCCTCTTCATCCTGCCTTAGCATACTCTCTCCCCAGTCACCCATTGTCCGAGC CTTCTTTGGGTCCCAGAATAACTTCTGTGCCTTCAATCTGACGTTCGGGGCCTTCCACAGGCCCTGGCTATTGGGA CCAACACTACCTCAGCTGGTCGATGCTCCTGGGTGTGGGCTTCCCTCCAGTGGACGGCTTGTCCCCACTAGTCCT GGGCATCATGGCAGTGGCCCTGGGTGCCCCAGGGCTCATGCTGCTAGGGGGGCGGCTTGGTTCTGCTGCACCA CAAGAAGTACTCAGAGTACCAGTCCATAAAT<u>TAA</u>GGCCCGCTCTCTGGAGGGAAGGACATTACTGAACCTGTCTT GCTGTGCCTCGAAACTCTGGAGGTTGGAGCATCAAGTTCCAGCCGGCCCCTTCACTCCCCCATCTTGCTTTTCTG TGGAGGCGGGCAGGGGACAGGGCTATTGATAAGGTCCCCTTGGTGTTGCCTTCTTGCATCTCCACACATTTCCCT TGGATGGGACTTGCAGGCCTAAATGAGAGGCATTCTGACTGGTTGGCTGCCCTGGAAGGCAAGAAAATAGATTTA TTTTTTTC

431/6881 FIGURE 401

MRGSVECTWGWGHCAPSPLLLWTLLLFAAPFGLLGEKTRQVSLEVIPNWLGPLQNLLHIRAVGTNSTLHYVWSSL GPLAVVMVATNTPHSTLSVNWSLLLSPEPDGGLMVLPKDSIQFSSALVFTRLLEFDSTNVSDTAAKPLGRPYPPY SLADFSWNNITDSLDPATLSATFQGHPMNDPTRTFANGSLAFRVQAFSRSSRPAQPPRLLHTADTCQLEVALIGA SPRGNRSLFGLEVATLGQGPDCPSMQEQHSIDDEYAPAVFQLDQLLWGSLPSGFAQWRPVAYSQKPGGRESALPC QASPLHPALAYSLPQSPIVRAFFGSQNNFCAFNLTFGASTGPGYWDQHYLSWSMLLGVGFPPVDGLSPLVLGIMA VALGAPGLMLLGGGLVLLLHKKYSEYQSIN

432/6881 FIGURE 402

GGCAGCATGGCGTCTTTCCGGCTTCTCCAAACCCTTGCGAAAAACTTTATTGGCAAAGCTATCAGAGAACGGACA GTGTACCCACTGAGGCGGCCAAAGCTTAACTGGATCAGGGCAGGATGACATGACCTTGTGGTAGATCCCAGAACT GAGGCCCCAGGATGACAGAACAGGAGACCCTGGCCCTACTGGAAGTGAAGAGGTCTGATTCCCCAGAGAAGAGCT CACCCAGGCCTTGGTTCCCAATGGCCGGCAGCCAGAAGGGGGAAGGTGGGGCCGAATCCCCGGGAGCTGAGTCCC TCAGAGTGGGGTCTTCAGCTGGATCTCCCACAGCCATAGAGGGGGGCTGAGGATGGTCTAGACAGCACAGTAAGTG TTGAACCAGAGCCCCCTGAGTCAGAACCACTTACCAAGCTAGAGGAGCTGCCCGAAGACGATGCCAACCTGCTGC CTGAGAAAGCGGCCCGTGCCTTCGTGCCTATTGACCTACAGTGCATTGAGCGGCAGCCCCAAGAAGACCTTATCG TGCGCTGTGAGGCAGGCGAGGGCGAGTGCCGAACCTTCATGCCCCCCGGGTCACCCCACCCCGACCCCACTGAGC GCAAGTGGGCTGAGGCAGTGGTGAGGCCGCCTGGCTGTTCCTGTGGGGGGCTGCGGGAGCTGTGGAGACCGTGAGT GGCTAAGGGCTGTGGCCTCCGTGGGAGCCGCACTCATTCTCTTCCCTTGCCTACTATACGGGGCATATGCCTTCC TGCCGTTTGATGTCCCACGGCTGCCCACCATGAGTTCCCGCCTGATCTACACACTGCGCTGCGGGGTCTTTGCCA CCTTCCCCATTGTGCTGGGGATCCTGGTGTACGGCCTGAGCCTGTTATGCTTTTCTGCCCTTCGGCCCTTTGGGG AGCCACGGCGGAGGTGGAGATCCACCGGCGATATGTGGCCCAGTCGGTCCAGCTCTTTATTCTCTACTTCTCA ACCTGGCCGTGCTTTCCACTTACCTGCCCCAGGATACCCTCAAACTGCTCCCTCTGCTCACTGGTCTCTTTGCCG TCTCCCGGCTGATCTACTGGCTGACCTTTGCCGTGGGCCGCTCCTTCCGAGGCTTCGGCTACGGCCTGACGTTTC TGCCACTGCTGTCGATGCTGATGTGGAACCTCTACTACATGTTCGTGGTGGAGCCGGAGCGCATGCTCACTGCCA ${\tt CCGAGAGCCGCCTGGACTACCCGGACCACGCCCGCTCGGCCTCCGACTACAGGCCCCGCCCCTGGGGC\underline{TGA}_{\tt GCCT}$ CTCCGCCCTCGCCCTCGGAGTAGGGGGTAGCGGCTTGGGTCTGACACATCTTTGAACCTTGTGGCCAGGCCTGGA TCTCCCCTTGCCGGAGCTGCCCTTCACCTTTGGGGCCCGAGACAGTCATAAGGGATGGACTTAGTTTTCTTGCAG GGAAAAAGGTGGACAGCCGTGTTTCTTAAGGATGCTGAGGGCATGGGGCCAGGACCAGGGGAGAGGCACAGCTCC TTCCTGAGCAGCCTCTCACCACTGCCACAAGGCTCCCTAATGCTGGTCTCTGCTCCACTCCCCGGCTTCCCGTGA GGCAGGAGGCAGAGCCACAGGCCTGACCACTTCTGTGCCAGTTGTCTAAGCAGAGCGCCTCAGGGACGC TGGAAATGCCTTAAGGATAGAGGCTGGGCATCACATCAAATGGGACTGTGGTGTTTTGGTGAAAACCTTCCTGAGG ATCTGGATTCAGGACCCTCCATGACTGGCCTATTTACTGTTTACAGCTGGCCAGTGCAGAGCTGCTGCTCTTTTA CCTTTTTAGGCCCCTGTAACTTCCCACCTTTAAACTGCCCAGAAGGCATGCCTCTCCCACAGGAAGAGGGGAGCA GACAGGGAAATCTGCCTACCAAGAGGGGTGTGTGTGTCTTTGTGCCCACACGTGGTGGCTGGGGAGTGCCTGGAT

MTEQETLALLEVKRSDSPEKSSPQALVPNGRQPEGEGGAESPGAESLRVGSSAGSPTAIEGAEDGLDSTVSEAAT LPWGTGPQPSAPFPDPPGWRDIEPEPPESEPLTKLEELPEDDANLLPEKAARAFVPIDLQCIERQPQEDLIVRCE AGEGECRTFMPPRVTHPDPTERKWAEAVVRPPGCSCGGCGSCGDREWLRAVASVGAALILFPCLLYGAYAFLPFD VPRLPTMSSRLIYTLRCGVFATFPIVLGILVYGLSLLCFSALRPFGEPRREVEIHRRYVAQSVQLFILYFFNLAV LSTYLPQDTLKLLPLLTGLFAVSRLIYWLTFAVGRSFRGFGYGLTFLPLLSMLMWNLYYMFVVEPERMLTATESR LDYPDHARSASDYRPRPWG

ACTCAGTGTTCGCGGGAGCCGCACCTACACCAGCCAACCCAGATCCCGAGGTCCGACAGCGCCCGGCCCAGATCC CCACGCCTGCCAGGAGCAAGCCGAGAGCCAGCCGGCCGCCACTCCGACTCCGAGCAGTCTCTGTCCTTCGACC $\tt CGAGCCCGCGCCCTTTCCGGGACCCCTGCCCCGCGGGCAGCGCTGCCAACCTGCCGGCC{\color{red} ATG}{\color{blue} GAGACCCCGTCC}$ CAGCGGCGCCCCCCCCCCCGCGGGGCGCAGGCCAGCTCCACTCCGCTGTCGCCCACCCGCATCACCCGGCTGCAG AACGCAGGGCTGCGCCTTCGCATCACCGAGTCTGAAGAGGTGGTCAGCCGCGAGGTGTCCGGCATCAAGGCCGCC TACGAGGCCGAGCTCGGGGATGCCCGCAAGACCCTTGACTCAGTAGCCAAGGAGCGCCCCCCCTGCAGCTGGAG CTGAGCAAAGTGCGTGAGGAGTTTAAGGAGCTGAAAGCGCGCAATACCAAGAAGGAGGGTGACCTGATAGCTGCT CAGGCTCGGCTGAAGGACCTGGAGGCTCTGCTGAACTCCAAGGAGGCCGCACTGAGCACTGCTCTCAGTGAGAAG $\tt CGCACGCTGGAGGGCGAGCTGCATGATCTGCGGGGCCAGGTGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCAAGCTTGAGGCAGCCCTAGGTGAGGCCAAGCTTGAGGCAGCCCAAGCTTGAGGCAGCCCAAGCCTAGGTGAGGCCAAGCCTAGGTGAGGCCAAGCCCAAGCCTAGGTGAGGCCAAGCCCAAGCCTAGGTGAGGCCAAGCCCAAGCCTAGGTGAGGCCAAGCCCAAGCCCAAGCCCCAAGCCCCAAGCCCAAGCCCAAGCCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCA$ AAGCAACTTCAGGATGAGATGCTGCGGCGGGTGGATGCTGAGAACAGGCTGCAGACCATGAAGGAGGAACTGGAC TTCCAGAAGAACATCTACAGTGAGGAGCTGCGTGAGACCAAGCGCCGTCATGAGACCCGACTGGTGGAGATTGAC AATGGGAAGCAGCGTGAGTTTGAGAGCCGGCTGGCGGATGCGCTGCAGGAACTGCGGGCCCAGCATGAGGACCAG GTGGAGCAGTATAAGAAGGAGCTGGAGAAGACTTATTCTGCCAAGCTGGACAATGCCAGGCAGTCTGATGAGAGG AACAGCAACCTGGTGGGGGCTGCCCACGAGGAGCTGCAGCAGTCGCGCATCGACAGCCTCTCTGCCCAG CTCAGCCAGCTCCAGAAGCAGCTGGCAGCCAAGGAGGCGAAGCTTCGAGACCTGGAGGACTCACTGGCCCGTGAG CGGGACACCAGCCGGCGGCTGCTGGCGGAAAAGGAGCGGGAGATGGCCGAGATGCGGGCAAGGATGCAGCAGCAG CTGGACGAGTACCAGGAGCTTCTGGACATCAAGCTGGCCCTGGACATGGAGATCCACGCCTACCGCAAGCTCTTG GAGGGCGAGGAGGAGAGGCTACGCCTGTCCCCCAGCCCTACCTCGCAGCGCAGCCGTGGCCGTGCTTCCTCAC TCATCCCAGACACAGGGTGGGGGCAGCGTCACCAAAAAGCGCAAACTGGAGTCCACTGAGAGCCGCAGCATC TCACAGCACGCACTAGCGGGCGCGTGGCCGTGGAGGAGGTGGATGAGGAGGGCAAGTTTGTCCGGCTGCGC AACAAGTCCAATGAGGACCAGTCCATGGGCAATTGGCAGATCAAGCGCCAGAATGGAGATGATCCCTTGCTGACT TACCGGTTCCCACCAAAGTTCACCCTGAAGGCTGGGCAGGTGGTGACGATCTGGGCTGCAGGAGCTGGGGCCACC CACAGCCCCCTACCGACCTGGTGTGGAAGGCACAGAACACCTGGGGCTGCGGGAACAGCCTGCGTACGGCTCTC ATCAACTCCACTGGGGAAGAAGTGGCCATGCGCAAGCTGGTGCGCTCAGTGACTGTGGTTGAGGACGACGAGGAT ${\tt GAGGATGGAGATGACCTGCTCCATCACCACCATGTGAGTGGTAGCCGCCGC} \underline{{\tt TGA}}{\tt GGCCGAGCCTGCACTGGGGCCC}$ ACCCAGCCAGGCCTGGGGGGCAGCCTCTCCCCAGCCTCCCCGTGCCAAAAATCTTTTCATTAAAGAATGTTTGGAA CTTT

METPSQRRATRSGAQASSTPLSPTRITRLQEKEDLQELNDRLAVYIDRVRSLETENAGLRLRITESEEVVSREVS GIKAAYEAELGDARKTLDSVAKERARLQLELSKVREEFKELKARNTKKEGDLIAAQARLKDLEALLNSKEAALST ALSEKRTLEGELHDLRGQVAKLEAALGEAKKQLQDEMLRRVDAENRLQTMKEELDFQKNIYSEELRETKRHETR LVEIDNGKQREFESRLADALQELRAQHEDQVEQYKKELEKTYSAKLDNARQSAERNSNLVGAAHEELQQSRIRID SLSAQLSQLQKQLAAKEAKLRDLEDSLARERDTSRRLLAEKEREMAEMRARMQQQLDEYQELLDIKLALDMEIHA YRKLLEGEEERLRLSPSPTSQRSRGRASSHSSQTQGGGSVTKKRKLESTESRSSFSQHARTSGRVAVEEVDEEGK FVRLRNKSNEDQSMGNWQIKRQNGDDPLLTYRFPPKFTLKAGQVVTIWAAGAGATHSPPTDLVWKAQNTWGCGNS LRTALINSTGEEVAMRKLVRSVTVVEDDEDEDGDDLLHHHHVSGSRR

GCGCAGACGCCCCAGCCCCCCCCCCCCAAAGGGGCGAGCGACGCCAAGCTCTGCGCTCTCTACAAAGAGGCC GAGCTGCGCCTGAAGGGCAGCAGCACACCACGGAGTGTTCCCGTGCCCACCTCCGAGCACGTGGCCGAGATC GTGGGCAGGCAAGGCTGCAAGATTAAGGCCTTGAGGGCCAAGACCAACACCTACATCAAGACACCGGTGAGGGGC GAGGAACCAGTGTTCATGGTGACAGGGCGACGGGAGGACGTGGCCACAGCCCGGCGGGAAATCATCTCAGCAGCG GAGCACTTCTCCATGATCCGTGCCTCCCGCAACAAGTCAGGCGCCGCCTTTGGTGTGGCTCCTGCTCTGCCCGGC CAGGTGACCATCCGTGTGCGGGTGCCCTACCGCGTGGTGGGGGCTGGTGGTGGGCCCCAAAGGGGCAACCATCAAG CGCATCCAGCAGCAAACCAACACATACATTATCACACCAAGCCGTGACCGCGACCCCGTGTTCGAGATCACGGGT GCCCCAGGCAACGTGGAGCGTGCGCGGGGGGGGGGTCGAGACGCACATCGCGGTGCGCACTGGCAAGATCCTCGAG TACAACAATGAAAACGACTTCCTGGCGGGGAGCCCCGACGCAGCAATCGATAGCCGCTACTCCGACGCCTGGCGG GTGCACCAGCCCGGCTGCAAGCCCCTCTCCACCTTCCGGCAGAACAGCCTGGGCTGCATCGGCGAGTGCGGAGTG GACTCTGGCTTTGAGGCCCCACGCCTGGGTGAGCAGGGCGGGGACTTTGGCTACGGCGGGTACCTCTTTCCGGGC GCCACGCCCACCTCCGTGCTCTTCTCCTCTGCCTCCTCCTCCTCCTCTTCCGCCAAGGCCCGCGCTGGGCCC CCGGGCGCACACCGCTCCCCTGCCACTTCCGCGGGACCCGAGCTGGCCGGACTCCCGAGGCGCCCCCCGGGAGAG TTTGAGAGCGAAGTGACTGCCGCCCTTGTGCCCTGCGGACACACCTGTTCTGCATGGAGTGTGCAGTACGCATC TGCGAGAGGACCCAGAGTGTCCCGTCTGCCACATCACAGCCACGCAAGCCATCCGAATATTCTCCTAAGCC GGGTGCGCCACTTTCAGAGCCTCTGGTCACCCTGTCCTGGAAAGATTGGGAGGGGCCCAGACTGAAAATTTTACT AGAGTTACAACTCTGATACCTCAACACCCCTTAAATCTGGAAGCAGCTAAGAGAAACTTTTGTTTTGCCAGAGG TGGCCACTAAGGCATTCTGACGCCCTCTGCCCACCTCCCCCGCTGTGTGTCACTCCACCCCTTCTTCCGAGGAGG GGGTGGGTAAAAGGGAGAGGGAGAATTACCACCTGTATCTAGAGGTGCTCTTTGCAATCCCTAAGCCCTCTGGTC CAGCCCAGCTTTGGGGACACCATCCTTCTGGGGAGAAGTAGGGGGAGGAATATTTGGATGGTCCCTCCATTCCTC TTCAGGCATCTGGAGGCCCTCTCCCCCACTCCTCCAAAGAAACATCTCAAATTATTGATGGAATGTATCCCCATT CTCAGTGAAAATGTGAGGAGGGGACTAATACTGGGGTAAAGGGTCAAACCCCCACCTTCATCACTATGGGCATTA TATTTAGGGAGTAGTTCTTGGGCTGGATTTTCTGGTTGTGGAAGTGGGGGCGCCAGAGTAGTGTGTCTGCTATTT AAAGGAGCAGGAAAGGGCGTGAGGCAGGAGGAGAGACTGGTGGAGGGAAGAGCTGCTCCCCATGCAGTGCCCG ACTCCCTGCACCCCTCTCAACCTGACCTGAACCTTTATTGAATCCTTATTAGCTTGAATCCTTATTAGCTTGAAT CCTCCATGCAAATCATGGAGTCTGTGTCCCACCTGATGTGGTTGAGGAGAAGCCAGGTCTTCAAAGAGGGGTCAG CCTGGGGCAAAGCAGGACTGGGGGGGGGGGCAGCAGGGCCTATTCTGAGAATCACATATTGTTACAGGCCTTG CACCCCTTTGCTGCTTCCCTCCTGCTCATTTGGGGCTGCCACCACCTCTCCACCCTCCTGGTTCCGCTGGCCGG GCCAAGAGAGGATGGAGGGATGGGAGTCCCAGGAGATCCTTGTAAATAGTGGGGTGGGACTGTTCTGAGTGATCA GGAGGTCACAGCCAAGAAAACTGCCCTGTGACGACTTCCCTCCTTCCCGCCTATGTGAGCCATCCTGAGATGTCT TGTCTGTCGTCCCCCTCCCCCTCTCCACTCTTTACCCACAAAGGCAGAAGACTGTTACACTAGGGGGCTCA GCAAATTCAATCCCACCCTTACCAATTGAGCCAAACCTAGAAACAAAACACAAAACACGAATAGTGAGAGACAAAA

LRLKGSSNTTECVPVPTSEHVAEIVGRQGCKIKALRAKTNTYIKTPVRGEEPVFMVTGRREDVATARREIISAAE
HFSMIRASRNKSGAAFGVAPALPGQVTIRVRVPYRVVGLVVGPKGATIKRIQQQTNTYIITPSRDRDPVFEITGA
PGNVERAREEIETHIAVRTGKILEYNNENDFLAGSPDAAIDSRYSDAWRVHQPGCKPLSTFRQNSLGCIGECGVD
SGFEAPRLGEQGGDFGYGGYLFPGYGVGKQDVYYGVAETSPPLWAGQENATPTSVLFSSASSSSSSSAKARAGPP
GAHRSPATSAGPELAGLPRRPPG

438/6881 FIGURE 408

GGAGGAGCCGGGCGGGCGGGCGGGCGGGTGGCGGCGGCGCATGGCGGAGCCGAGCGGGGCCGAGACGAGG CCCCCATTCGGGTCACCGTCAAGACCCCCAAGGACAAGGAGGAAATTGTGATCTGCGATCGAGCCTCGGTCAAG GAGTTCAAAGAGGAAATCTCCCGGAGGTTTAAGGCTCAGCAGGATCAGCTGGTCCTGATCTTCGCAGGCAAGATC CTCAAGGATGGGGACACACTGAACCAGCACGGAATCAAGGACGGGCTCACTGTCCATCTGGTCATCAAGACCCCT CAGAAGGCTCAAGATCCAGCTGCTGCCACTGCTTCTTCCCCCTCCACACCTGACCCTGCCTCAGCACCCTCCACC ACGCCTGCTTCACCCGCCACCCCTGCCCAGCCCTCCACCTCTGGCAGTGCCTCTTCAGATGCTGGCAGTGGAAGC GGCTTTGGGGGCATCCTGGGGCTGGGCAGCCTAGGCCTGGGCTCTGCCAACTTCATGGAGCTGCAGCAGCAGATG CAGCGGCAGCTGATGTCCAATCCTGAGATGCTGTCACAGATCATGGAGAACCCCCTGGTCCAGGATATGATGTCT AACCCTGATCTGATGCGTCACATGATTATGGCCAACCCCCAGATGCAGCAGTTGATGGAGCGGAACCCTGAGATC AGCCACATGCTCAATAACCCTGAACTCATGAGGCAGACAATGGAGCTTGCTCGGAATCCAGCCATGATGCAAGAG ATGATGCGGAACCAGGACCGGGCCCTGAGCAACCTTGAGAGCATCCCTGGAGGGTATAATGCCCTCCGCCGCATG TACACGGACATCCAGGAGCCCATGTTCAGTGCTGCCCGGGAACAGTTTGGCAACAATCCCTTCTCTCCCTGGCC ACAGTCTCGAACCCCTTTGGGATCAATGCGGCTAGCCTGGGGTCAGGGATGTTCAATAGCCCAGAAATGCAAGCC CTCCTCCAGCAGATCTCTGAGAACCCCCAGCTGATGCAGAATGTGATCTCAGCACCCTACATGCGCAGCATGATG CAGACGCTTGCCCAGAACCCCGACTTTGCTGCTCAGATGATGGTGAATGTGCCGCTCTTCGCGGGGAACCCCCAA CTGCAGGAGCAGCTCCGCCTGCAGCTCCCAGTCTTCCTGCAGCAGATGCAGAACCCAGAGTCACTCTCCATCCTT ACCAATCCCCGAGCCATGCAGGCATTGCTGCAGATCCAGCAGGGACTACAGACCTTGCAGACCGAGGCCCCTGGG CCCGAGGCCCCACTTCCTCACCAGCCACGCCAGCCACATCTTCTCCAACAGGGGCTTCCAGCGCCCAGCAGCAA CTCATGCAGCAGATGATCCAGCTTTTGGCTGGAAGTGGAAACTCACAGGTGCAGACGCCAGAAGTGAGATTTCAG CAGCAGCTGGAGCAGCTCAACTCCATGGGCTTCATCAATCGTGAGGCCTAACCTGCAGGCCCTGATTGCCACAGGA GGGGACATCAACGCAGCTATCGAGAGACTGCTGGGCTCCCAGCTCTCCTAATCCCTCGGCCCATGCCTCCTGCCT CTCCCCTCCATGTCAGCATTCGGTTCTTCTGTCAATCCTTACCCTCTGCAGCTTGTCCTCCCTTCCGTCTT AGTTTCATTGATTGACTCTACCTCCTTGCCCCACACCACTTTTGCAATCTTTAAACTTTCAGTGGCTGTGCAGAG TCGAGGGAGGAACCAGCTCTCTGGTTTACTGGAACATAGTCTTCCATCTATACCACTAGGGTTTTGTCTTATGTT GGTGGGAACTGTTGGAAATTCCAGGGTAAGGAGGAAGATGCCTGTTCTCCCTGTCTGAAGAGGGAGATGAGACAG CTCTCTGGACAGGAATTAACAAACGCTGGAGCAGCCCAGAGGAAATTCGTGTGAAAGAGGAGGGAATGAGATTAT TCGGAGGAAGGGAATGGGGGAGACAGCCTGAGTAAAAGGCTTGGAAGTTGGAATTAACAGTGGGGAGCAGAAGCA CTCATAGCTCTTTTAGGCAGAAGAATCCAGGCCCGAGCTGGCAGAAGAAGACTTAGAGATGCTAATGGAATTTAAA CTGAAAAAAGGAGCCCAATGAAGCTAAGCGCCACGCCCCACAAGGGGTCATATTGGCTTTAGTTCCTCAAGCATA GCCCCCTCAAAAGACATGAAGGGGGTTGGGGTCTGTGTGAGTAGTGGGGAGGTGCATGTGTATCCACATGTGTG CATACACTCTTAAGTTGGGTGGGAAGTGGATTCCTTGTTGGTTTCTGGTTCAGAGTGCTCTCCCACCACCAGAGA GGGTAACCCAGAGGTAATGTGGGTACCCTTTCTGAAGCTGTCAGGGCTGTGACTAGCACCCTTATCACCCCTCAC TGCCTTGTGGGAATAGTAGAGGGTTTTTTTCCTCCAGAGCCCCTGGCCTTTCAGTTCTTAACTATTTCCCTCCAG GCCAGAAAGTTTTCTTTGAGGAAGGAGGAGGAGGGTGGCAATGATGCCTTTGATCTGGAATTGGACATTTCTCT GGCTGAGAATATGACGGCAAGAGGAACAGAGTTTGCTCCAAGTGGGAAAGGGTCCCAAGCAGTCCAGAGAAGATG

FIGURE 410

 $\label{thm:mass} \begin{tabular}{l} MRLLSFVVLALFAVTQAEEGARLLASKSLLNRYAVEGRDLTLQYNIYNVGSSAALDVELSDDSFPPEDFGIVSGM\\ LNVKWDRIAPASNVSHTVVLRPLKAGYFNFTSATITYLAQEDGPVVIGSTSAPGQGGILAQREFDRRFSPHFLDW\\ AAFGVMTLPSIGIPLLLWYSSKRKYDTPKTKKN\\ \end{tabular}$

FIGURE 411A

TCCTCCCTGGTCCCCCGTCCGATTATGTCTCGGATCGAATCCCTCACGCGGGCGCGGATCGACCGGAGCAGAGA GCTGGCGAGCAAGACCCGGGAAAAGGAGAAAATGAAGAAAGCCAAGGATGCCCGCTATACAAATGGGCACCTCTT CACCACCATTTCAGTTTCAGGCATGACCATGTGCTATGCCTGTAACAAGAGCATCACAGCCAAGGAAGCCCTCAT CTGCCCAACCTGCAATGTGACTATCCACAACCGCTGTAAAGACACCCTCGCCAACTGTACCAAGGTCAAGCAGAA GCAACAGAAAGCGGCCCTGCTGAAGAACAACACCGCCTTGCAGTCCGTTTCTCTTCGAAGTAAGACAACCATCCG GGAGCGGCCAAGCTCGGCCATCTACCCCTCCGACAGCTTCCGGCAGTCCCTCCTGGGCTCCCGCCGTGGCCGCTC CTCCTTGTCTTTAGCCAAGAGTGTTTCTACCACCAACATTGCTGGACATTTCAATGATGAGTCTCCCCTGGGGCT GCGCCGGATCCTCTCACAGTCCACAGACTCCCTCAACATGCGGAACCGAACCCTATCCGTGGAATCCCTCATTGA TCTTGCTGTGGACAGCAGCTTCCTGCAGCAGCATAAAAAGGAGGTGATGAAGCAGCAAGATGTCATCTATGAGCT AATCCAGACAGAGCTGCACCATGTGAGGACACTGAAGATCATGACCCGCCTCTTCCGCACGGGGATGCTGGAAGA GCTACACTTGGAGCCAGGAGTGGTCCAGGGCCTGTTCCCCTGCGTGGACGAGCTCAGTGACATCCATACACGCTT GGGTGATCTGCTCATCAGCCAGTTCTCAGGTCCTAGTGCGGAGCAGATGTGTAAGACCTACTCGGAGTTCTGCAG CCGCCACAGCAAGGCCTTAAAGCTCTATAAGGAGCTGTACGCCCGAGACAAACGCTTCCAGCAATTCATCCGGAA AGTGACCCGCCCGCCGTGCTCAAGCGGCACGGGGTACAGGAGTGCATCCTGCTGGTGACTCAGCGCATCACCAA GTACCCGTTACTCATCAGCCGCATCCTGCAGCATTCCCACGGGATCGAGGAGGAGCGCCAGGACCTGACCACAGC ACTGGGGCTAGTGAAGGAGCTGCTGTCCAATGTGGACGAGGGTATTTATCAGCTGGAGAAAGGGGCCCGTCTGCA GGAGATCTACAACCGCATGGACCCTCGGGCCCAAACCCCAGTGCCTGGCAAGGGCCCCTTTGGCCGAGAGGAACT TCTGAGGCGCAAACTCATCCACGATGGCTGCCTGCTCTGGAAGACAGCGACGGGGGCGCTTCAAAGATGTGCTAGT GCTGCTGATGACAGATGTACTGGTGTTTCTCCAGGAAAAGGACCAGAAGTACATCTTTCCTACCCTGGACAAGCC TTCAGTGGTATCGCTGCAGAATCTAATCGTACGAGACATTGCCAACCAGGAGAAAGGGATGTTTCTGATCAGCGC AGCCCCACCTGAGATGTACGAGGTGCACACAGCATCCCGGGATGACCGGAGCACCTGGATCCGGGTCATTCAGCA GAGCGTGCGCACATGCCCATCCAGGGAGGACTTCCCCCTGATTGAGACAGAGGATGAGGCTTACCTGCGGCGAAT TAAGATGGAGTTGCAGCAGAAGGACCGGGCACTGGTGGAGCTGCTGCGAGAGAAGGTCGGGCTGTTTGCTGAGAT GACCCATTTCCAGGCCGAAGAGGATGGTGGCAGTGGGATGGCCCTGCCCACCCTGCCCAGGGGCCTTTTCCGCTC TGAGTCCCTTGAGTCCCCTCGTGGCGAGCGGCTGCTGCAGGATGCCATCCGTGAGGTGGAGGGTCTGAAAGACCT TAACACGAGTCCTGGGGTCACTGCCAATGGTGAGGCCAGAACCTTCAATGGCTCCATTGAACTCTGCAGAGCTGA CTCAGACTCTAGCCAGAGGGATCGAAATGGAAATCAGCTGAGATCACCGCAAGAGGGGGGGTTACAGCGATTGGT CAATCTCTATGGACTTCTACATGGCCTACAGGCAGCTGTGGCCCAGCAGGACACTCTGATGGAAGCCCGGTTCCC TGAGGGCCCTGAGCGGCGGAGAAGCTGTGCCGAGCCAACTCTCGGGATGGGGAGGCTGGCAGGGCTGGGGCTGC CCCTGTGGCCCCTGAAAAGCAGGCCACGGAACTGGCATTACTGCAGCGGCAACATGCGCTGCTGCAGGAGGAGCT ACGGCGCTGCCGGCGGCTAGGTGAAGAACGGGCAACCGAAGCTGGCAGCCTGGAGGCCCGGCTCCGGGAGAGTGA GCAGGCCCGGGCACTGCTGGAGCGTGAGGCCGAAGAGGCTCGAAGGCAGCTGGCCGCCCTGGGCCAGACCGAGCC ACTCCCAGCTGAGGCCCCCTGGGCCCGCAGACCTGTGGATCCTCGGCGGCGCAGCCTCCCCGCAGGCGATGCCCT GTACTTGAGTTTCAACCCCCCACAGCCCAGCCGAGGCACTGACCGCCTGGATCTACCTGTCACTACTCGCTCTGT CCATCGAAACTTTGAGGACCGAGAGAGGCAGGAACTGGGGAGCCCCGAAGAGCGGCTGCAAGACAGCAGTGACCC GGACATCCCGGAGGAGACGGAGAGCCGCGACGGGGGGGCTGTAGCCTCCGAGAGCTAAGGGGGCCCCTCCCCCCT GCCCCGTGCCCCACTGAAGAACATTACTGAGGGGGCTAACCTTGGGGACTCCAATTTGCCAATGATGAGGGAACA TTTGAAAGAACTGCAAATTGTCCTTGCCAGCTCTTGGGATCCTTGGATACCTGGGGCCATTTAAGAAGCTAGGGG AATTAGGCCACAACACCCCCTGGGACATCCGAAAGCTACACCACAGATGCCAGTGGTTCATGCCTTCTTCCCGCA GGAACCAAGCCATAGGGATCAGAGGGCCTTGTCCTTGAACACTACTGGGGTATATTCAGGCTCATCCACGCAGCT GCTGGGTTCTTGCCCTAACGGCCCTCCCCTGCAACATCCGTCTTGGAGGAGAGGCTGCAGCCACAGCACCCTACT GCCCTTTAAATAAAGGAGGGCTGTGGGCAGGGCCATGTCCCTTTCTCCTCTCCCCTCAACCTCTTACTGCTGTTC

442/6881 FIGURE 411B

ATCCAGCAGCACGTTCAGCTCTTGACCCAAATCCACCTTCTTGCCACCTGCAACCCCAACCTCAATCCGGAGGCC ACTACCACCAGGATATTTCTTAAAGAGCTGGGAACCTTTGCTCAAAGCTCCATCGCCCTTCACCATCAGTACAAC CCCAAGTTTCAGACCCTGTTCCAACCCTGTAACTTGATGGGAGCTATGCAGCTGATTGAAGACTTCAGCACACAT GCTTGGATTCTGGCCACAAGCAAGGTTTTCATGTATCCAGAGTTACTTCCAGTGTGTTCCCTGAAGGCAAAGAAT CCCCAGGATAAGATCGTCTTCACCAAGGCTGAGGACAATTTGTTAGCTTTAGGACTGAAGCATTTTGAAGGAACT GAGTTTCCTAATCCTCTAATCAGCAAGTACCTTCTAACCTGCAAAACTGCCCACCAACTGACAGTGAGAATCAAG AACCTCAACATGAACAGAGCTCCTGACAACATCATTAAATTTTATAAGAAGACCAAACAGCTGCCAGTCCTAGGA TTAAAGGCCAGTCTGCCATCCATCCAGGAAGAACTGCGGCACATGGCTGATGGTGCTAGAGAGGTAGGAAATATG ACTGGAACCACTGAGATCAACTCAGATCGAAGCCTAGAAAAAGACAATTTGGAGTTGGGGAGTGAATCTCGGTAC CCACTGCTATTGCCTAAGGGTGTAGTCCTGAAACTGAAGCCAGTTGCCACCCGTTTCCCCAGGAAGGCTTGGAGA CAGAAGCGTTCATCAGTCCTGAAGCCCCTCCTTATCCAACCCAGCCCTCTCTCCCAGCCCAGCTTCAACCCTGGG AAAACACCAGCCCGATCAACTCATTCAGAAGCCCCTCCGAGCAAAATGGTGCTCCGGATTCCTCACCCAATACAG CCAGCCACTGTTTTACAGACAGTTCCAGGTGTCCCTCCACTGGGGGTCAGTGGAGGTGAGAGTTTTGAGTCTCCT GCCCCTGTGCCCAAGGTAATGCTGCCCTCCCTTGCCCCTTCTAAGTTTCGAAAGCCATATGTGAGACGGAGACCC TCAAAGAGAAGAGGAGTCAAGGCCTCTCCCTGTATGAAACCTGCCCCTGTTATCCACCACCCTGCATCTGTTATC TTCACTGTTCCTGCTACCACTGTGAAGATTGTGAGCCTTGGCGGTGGCTGTAACATGATCCAGCCTGTCAATGCG AACCAGTCCCTTGTGGCCTCCTCTGTCTCACCCTTAATTGTTTCTGGCAATTCTGTGAATCTTCCTATACCATCC ACCCCTGAAGATAAGGCCCACGTGAATGTGGACATTGCTTGTGCTGTGGCTGATGGGGAAAATGCCTTTCAGGGC GGGCCTCCACTAGCAGATGCAGAGTGCCAAGAAGGATTGTCAGAGAATAGTGCCTGTCGCTGGACCGTTGTGAAA ACAGAGGAGGGAGGCAAGCTCTGGAGCCGCTCCCTCAGGGCATCCAGGAGTCTCTAAACAACCCTACCCCTGGG GATTTAGAGGAAATTGTCAAGATGGAACCTGAAGAAGCTAGAGAGGAAATCAGTGGATCCCCTGAGCGTGATATT TGTGATGACATCAAAGTGGAACATGCTGTGGAATTGGACACTGGTGCCCCAAGCGAGGAGTTGAGCAGTGCTGGA GAAGTAACGAAACAGACAGTCTTACAGAAGGAAGAGGAGGAGGAGTCAGCCAACTAAAACCCCTTCATCTTCAA GAGCCCCCTGATGAAGGAACCTCAGGGACAGATGTGAACAAAGGATCATCAAAGAATGCTTTGTCCTCAATGGAT CAAGATGAGGAAGATGAAATGTCATCAGCTTCTGAGGAATCTGTGCTTTCTGTCCCAGAACTCCAGGTGAGAGCT **ACTATGGATAGTCCTAAAATCATTTGTATTTGA**

444/6881 FIGURE 413

MQQHVQLLTQIHLLATCNPNLNPEATTTRIFLKELGTFAQSSIALHQYNPKFQTLFQPCNLMGAMQLIEDFSTH VSIDCSPHKTVKKTANEFPCLPKQVAWILATSKVFMYPELLPVCSLKAKNPQDKIVFTKAEDNLLALGLKHFEGT EFPNPLISKYLLTCKTAHQLTVRIKNLNMNRAPDNIIKFYKKTKQLPVLGKCCEEIQPHQWKPPIEREEHRLPFW LKASLPSIQEELRHMADGAREVGNMTGTTEINSDRSLEKDNLELGSESRYPLLLPKGVVLKLKPVATRFPRKAWR QKRSSVLKPLLIQPSPSLQPSFNPGKTPARSTHSEAPPSKMVLRIPHPIQPATVLQTVPGVPPLGVSGGESFESP AALPAVPPEARTSFPLSESQTLLSSAPVPKVMLPSLAPSKFRKPYVRRPSKRRGVKASPCMKPAPVIHHPASVI FTVPATTVKIVSLGGGCNMIQPVNAAVAQSPQTIPITTLLVNPTSFPCPLNQSLVASSVSPLIVSGNSVNLPIPS TPEDKAHVNVDIACAVADGENAFQGLEPKLEPQELSPLSATVFPKVEHSPGPPLADAECQEGLSENSACRWTVVK TEEGRQALEPLPQGIQESLNNPTPGDLEEIVKMEPEEAREEISGSPERDICDDIKVEHAVELDTGAPSEELSSAG EVTKQTVLQKEEERSQPTKTPSSSQEPPDEGTSGTDVNKGSSKNALSSMDPEVRLSSPPGKPEDSSSVDGQSVGT PVGPETGGEKNGPEEEEEEDFDDLTQDEEDEMSSASEESVLSVPELQVRAGEYSQVFRGLSNMYHLLICHLLACC TMDSPKIICI

 ${\tt ACTAGTCCTCGACTCACGTGCAAGG} \underline{{\tt ATG}} {\tt ATGCTGAAAGGAATAACAAGGCTTATCTCTAGGATCCATAAGTTGGA}$ CCCTGGGCGTTTTTTACACATGGGGACCCAGGCTCGCCAAAGCATTGCTGCTCACCTAGATAACCAGGTTCCAGT TGAGAGTCCGAGAGCTATTTCCCGCACCAATGAGAATGACCCGGCCAAGCATGGGGATCAGCACGAGGGTCAGCA CTACAACATCTCCCCCAGGATTTGGAGACTGTATTTCCCCATGGCCTTCCTCCTCGCTTTGTGATGCAGGTGAA GACATTCAGTGAAGCTTGCCTGATGGTAAGGAAACCAGCCCTAGAACTTCTGCATTACCTGAAAAAACACCAGTTT TGCTTATCCAGCTATACGATATCTTCTGTATGGAGAGAGGGAACAGGAAAAACCCTAAGTCTTTGCCATGTTAT TCATTTCTGTGCAAAACAGGACTGGCTGATACTACATATTCCAGATGCTCATCTTTGGGTGAAAAATTGTCGGGA TCTTCTGCAGTCCAGCTACAACAACAGCGCTTTGATCAACCTTTAGAGGCTTCAACCTGGCTGAAGAATTTCAA AACTACAAATGAGCGCTTCCTGAACCAGATAAAAGTTCAAGAGAAGTATGTCTGGAATAAGAGAAAAGCACTGA ${\tt GAAAGGGAGTCCTCTGGGAGAAGTGGTTGAACAGGGCATAACACGGGTGAGGAACGCCACAGATGCAGTTGGAAT}$ TCTTTGGGGAAGAACCACTCTGAAAAGAGAAGATAAAAGCCCGATTGCCCCCGAGGAATTAGCACTTGTTCACAA CTTGAGGAAAATGATGAAAAATGATTGGCATGGAGGCGCCATTGTGTCGGCTTTGAGCCAGACTGGGTCTCTCTT CATCCTGGTTTCCAACTATAACCCAAAGGAATTTGAAAGTTGTATTCAGTATTATTTGGAAAACAATTGGCTTCA ACATGAGAAAGCTCCTACAGAAGAAGGGAAAAAAAGAGCTGCTGTTCCTAAGTAACGCGAACCCCTCGCTGCTGGA $\tt GCGGCACTGTGCCTACCTC\underline{TAA}GCCAAGATCACAGCATGTGAGGAAGACAGTGGACATCTGCTTTATGCTGGACCC$ CAGTAAGATGAGGAAGTCGGGCAGTACACAGGAAGAGGAGCCAGGCCCTTGTACCTATGGGATTGGACAGGACTG CAGTTGGCTCTGGACCTGCATTAAAATGGGTTTCACTGTGAATGCGTGACAATAAGATATTCCCTTGTTCCTAAA ACTTTATATCAGTTTATTGGATGTGGTTTTTCACATTTAAGATAATTATGGCTCTTTTCCTAAAAAATAAAATAT

MMLKGITRLISRIHKLDPGRFLHMGTQARQSIAAHLDNQVPVESPRAISRTNENDPAKHGDQHEGQHYNISPQDL ETVFPHGLPPRFVMQVKTFSEACLMVRKPALELLHYLKNTSFAYPAIRYLLYGEKGTGKTLSLCHVIHFCAKQDW LILHIPDAHLWVKNCRDLLQSSYNKQRFDQPLEASTWLKNFKTTNERFLNQIKVQEKYVWNKRESTEKGSPLGEV VEQGITRVRNATDAVGIVLKELKRQSSLGMFHLLVAVDGINALWGRTTLKREDKSPIAPEELALVHNLRKMMKND WHGGAIVSALSQTGSLFKPRKAYLPQELLGKEGFDALDPFIPILVSNYNPKEFESCIQYYLENNWLQHEKAPTEE GKKELLFLSNANPSLLERHCAYL

447/6881 FIGURE 416

TCTTCACCACTGCTCTCCCAGAGGTCCAGGTCCGGGAGATGACAGTGGCTCCCAGAAAGCCCAGGATTCAATCGC TGAGAGAGTGCTTAGGCCCGAATGCCGGCCCAAATCGTTCTACTCACCGTGTCGGAGGCCGAGAGCGATGAGAGT GGCAAACTGAGAGGAGGCGGATCCCGCAACCGACACTGGGATCGTTTCCCCTCGCAAAGCGAACCCAAAATGGCG CAACCTCCCACTCCTCCCTCGCGTTCTTCCCCACGGTCCCCCGCTTCGCCCGACTCCGGCCATGTAGCGCGC CTGCGAGCCAGCCATCCCGTACGCGCTCACCCACGGGAACCTCCTCGCCCAGTTCTCCACTCCCCCTCAGACCCT GTCAAGCCGGCTCCAGCGCAGGCCCTCACGCGTACCTTCAGCGGCGCGAGCCCAAGCCTTCTCCACCTCCTCTTC CACTCCTCGCGCGTGCGCCTCCCACAGTCCCCACCGCGGGACTGTTCCATTCCTGGCGGCTGCAGGGGCAGGAGA ${\tt GGGCGGCCTAGCGCCCCTCTGCCGGCCGGTGGTTGGAGGCCGCGGCGGCGGCGCGTTGAGTCGTTTCCTGCCGG} {\tt A}$ TCTGGAGAACTAGTCCTCGACTCACGGTGAGGGAATGGACCGACACGGGTATTGTACCGCTGAGGGAAAGGAGCG GGACTCCGGACCTCCAGGAGGTAGGGAGTGAGGCCGGTAGACCGGCGCGCCTCCGGGGGGGATTCCTCCCGGGCG $\tt TTCTCGAATTTCACACCACTGTCCATATGCGA\underline{TGA} \tt TGTTTGTTTGCCCTTGACGCACTTACTCATGGATGGTACT$ TCAGCCTCGTTAGACAGCCTGGTGATGGAGGATGAAGAAACCATGTGCTTCTCATTCAGTTCTGGACTCAGTTTC CCTTGTCTTCAGCAAGTTATTTTTGTTAGTTCCTTATCAAAAAGTGTACATAAAAATTAGGCAACTCCAAACATG CCTCCAGGGTTGGTGTGAAATAATAAGATAGGGCTGGGCGGGGGGGCTCACGCCTGTAATCCCAGCACTTTGG GAGGCCGAGGCAGGTGGATGACAAGGTGAAGAGATCGAGACAATCCTGGCCAACATGGTGAAACCCCGTCTCTAC TAAAAATACAAATATTAGCCGGCCGTGGTGGCGGGCGCCTGTAGCCCCAGCTACTCGGGAGGCTGAGGCAGAGA ATTGCTTGAACCCGGGCGGCGGAAGTTGCAGTGAGCCGAGATCGCGCCACTGCACTCCAGCCTGGCGACAAAGCG AGACTCCGTCACACACACACACACACACACACACAAAATAATATATATGTAAAGTGGAATTAGCTCCAAGTCGTTAAT AAAACAAAGCAGGCCGGGCGTCTTGTTAAATAGTTGTATCAATGACTTGATTTAGATTAATGAGGATATATTTTT TCTCAGCACTTTGGGAGGCGGAGGAGGGCGCATTGCTTGAGCCTAGGAGTTCGAGACCAGCTTAGGCAACACGGT GAAACCCCATCTCTACAAAAAGACACAAAAATTAGACAGGTGTGGCACACGCTTGTAGTCTGAGCTACTTGGGAG GCTGAAGCAGGAGGATTGAGGAAGAGGTTGCAAAGTTAGCCGAGATCACGCCATCACACTGCAGCCTAGGTGACA GAGCGAGACCCTGTCTCAAAAAAAGAAAGAAGACATTAGCAGAAAAGCTGAGGAAATGCAAATAAAGTCTGCAAT TTTTAAAT

448/6881 FIGURE 417

MTRPFFAVSGRALWSRPQAACVGRLVWRTSPRLTVREWTDTGIVPLRERSGTPDLQEVGSEAGRPARLRGGFLPG VELPTWDPRKFGVVVCFLLLLTLLGFLEFHTTVHMR

449/6881 FIGURE 418

GAGAGAAGAGGAGGTGGAGAAGGCTTGGGCTCGCGCCGCTGAAGTCGGCTTACCCGCTGGCCGCCTCCTGACAAG CGGGAGGGATCCGCGGTGGACCCAGGGAAGCGGAGGAGCCTGGCGGCCACCCCCTCTTCCTCACTTCCCTGTACT CTCATCGCTCTCGGCCTCCGACACGAAAAGGAAGCAAATGAGCTGATGGAAGATCTGTTTGAAACTAGACAGGGT CTTGCCATGTTCTGGAACTCATAGGCTCAAGTAATCTTCCTGCCTCAAACCTCCCAAAGTGCTGGAATTACAGTTC AACTTTAACACCCCTCAAGCTCTACGGTTTGAGGAACTACTGGCCAACCTACTAAATGAACAACATCAGATAGCG AAGGAACTATTTGAACAGCTGAAGATGAAGAAACCTTCAGCCAAACAGCAGAAGGAGGTAGAGAAGGTTAAACCC CAGTGTAAGGAAGTTCATCAGACCCTGATTCTGGACCCAGCACAAAGGAAGACTCCAGCAGCAGATGCAGCAG CATGTTCAGCTCTTGACACAAATCCACCTTCTTGCCACCTGCAACCCCAATCTCAATCCGGAGGCCAGTAGCACC AGGATATGTCTTAAAGAGCTGGGAACCTTTGCTCAAAGCTCCATCGCCCTTCACCATCAGTACAACCCCAAGTTT CAGACCCTGTTCCAACCCTGTAACTTGATGGGAGCTATGCAGCTGATTGAAGACTTCAGCACATGTCAGCATT GACTGCAGCCCTCATAAAACTGTCAAGAAGACTGCCAATGAATTTCCCTGTTTGCCAAAGCAAGTGGCTTGGATC CTGGCCACAAGCAAGGTTTTCATGTATCCAGAGTTACTTCCAGTGTGTTCCCTGAAGGCAAAGAATCCCCAGGAT AAGATCCTCTTCACCAAGGCTGAGGACAATTTGTTAGCTTTAGGACTGAAGCATTTTGAAGGGACTGAGTTTCTT AACCCTCTAATCAGCAAGTACCTTCTAACCTGCAAGACTGCCCGCCAACTGACAGTGAGAATCAAGAACCTCAAC ATGAACAGAGCTCCTGACAACATCATTAAATTTTATAAGAAGACCAAACAGCTGCCAGTCCTAGGAAAATGCTGT GAAGAGATCCAGCCACATCAGTGGAAGCCACCTATAGAGAGAAGAACACCGGCTCCGATTCTGGTTAAAGGCC AGTCTGCCATCCAGGAAGAACTGCGGCACATGGCTGATGGTGCTAGAGAGGTAGGAAATATGACTGGAACC ACTGAGATCAACTCAGATCAAGGCCTAGAAAAAGACAACTCAGAGTTGGGGAGTGAAACTCGGTACCCACTGCTA TTGCCTAAGGGTGTAGTCCTGAAACTGAAGCCAGTTGCCGACCGTTTCCCCAAGAAGGCTTGGAGACAGAAGCGT TCATCAGTCCTGAAACCCCTCCTTATCCAACCCAGCCCCTCTCTCCAGCCCAGCTTCAACCCTGGGAAAACACCA GTTTTACAGACAGTTCCAGGTGTCCCTCCACTGGGGGTCAGTGGAGGTGAGAGTTTTGAGTCTCCTGCAGCACTG CCCAAGGTAATGATGCCCTCCCCTGCCTCTTCCATGTTTCGAAAGCCATATGTGAGACGGAGACCCTCAAAAAGA AGGGGAGCCAGGGCCTTTCGCTGTATCAAACCTGCCCCTGTTATCCACCCTGCATCTGTTATCTTCACTGTTCCT GCTACCACTGTGAAGATTGTGAGCCTTGGCGGTGGCTGTAACATGATCCAGCCTGTCAATGCGGCTGTGGCCCAG GTGGCCTCCTCTGTCTCACCCTTAATTGTTTCTGGCAATTCTGTGAATCTTCCTATACCATCCACCCCTGAAGAT AAGGCCCACATGAATGTGGACATTGCTTGTGCTGTGGCTGATGGGGAAAATGCCTTTCAGGGCCTAGAACCCAAA TTAGAGCCCCAGGAACTATCTCCTCTCTCTGCTACTGTTTTCCCCAAAGTGGAACATAGCCCAGGGCCTCCACCA GTCGATAAACAGTGCCAAGAAGGATTGTCAGAGAACAGTGCCTATCGCTGGACCGTTGTGAAAACAGAGGAGGGA AGGCAAGCTCTGGAGCCGCTCCCTCAGGGCATCCAGGAGTCTCTAAACAACTCTTCCCCTGGGGATTTAGAGGAA GTTGTCAAGATGGAACCTGAAGATGCTACAGAGGAAATCAGTGGATTTCTT<u>TGA</u>GCTAGGAGAATAAGAGTCTGG AGACTGGGAGCCTTCACTTCGGCCTCCGATTGGTGGCGCATAGGGTGTAACCAATAGGAAACCCCTAAAGGGTAC ΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑΑ

MGFSNMEDDGPEEEERVAEPQANFNTPQALRFEELLANLLNEQHQIAKELFEQLKMKKPSAKQQKEVEKVKPQCK
EVHQTLILDPAQRKRLQQQMQQHVQLLTQIHLLATCNPNLNPEASSTRICLKELGTFAQSSIALHHQYNPKFQTL
FQPCNLMGAMQLIEDFSTHVSIDCSPHKTVKKTANEFPCLPKQVAWILATSKVFMYPELLPVCSLKAKNPQDKIL
FTKAEDNLLALGLKHFEGTEFLNPLISKYLLTCKTARQLTVRIKNLNMNRAPDNIIKFYKKTKQLPVLGKCCEEI
QPHQWKPPIEREEHRLPFWLKASLPSIQEELRHMADGAREVGNMTGTTEINSDQGLEKDNSELGSETRYPLLLPK
GVVLKLKPVADRFPKKAWRQKRSSVLKPLLIQPSPSLQPSFNPGKTPAQSTHSEAPPSKMVLRIPHPIQPATVLQ
TVPGVPPLGVSGGESFESPAALPAMPPEARTSFPLSESQTLLSSAPVPKVMMPSPASSMFRKPYVRRPSKRRGA
RAFRCIKPAPVIHPASVIFTVPATTVKIVSLGGGCNMIQPVNAAVAQSPQTIPIATLLVNPTSFPCPLNQPLVAS
SVSPLIVSGNSVNLPIPSTPEDKAHMNVDIACAVADGENAFQGLEPKLEPQELSPLSATVFPKVEHSPGPPPVDK
QCQEGLSENSAYRWTVVKTEEGRQALEPLPQGIQESLNNSSPGDLEEVVKMEPEDATEEISGFL

AGCGCAGT<u>ATG</u>GCGGGCGGGGCCCGGGAGGTGCTCACACTGCAGTTGGGACATTTTGCCGGTTTCGTGGGCGCGC ACTGGTGGAACCAGCAGGATGCTGCGCTGGGCCGAGCGACCGATTCCAAGGAGCCCCCGGGAGAGCTGTGCCCCG ACGTCCTGTATCGTACGGCCGGACGCTGCACGGCCAGGAGACCTACACGCCGCGACTCATCCTCATGGATCTGA AGGGTAGTTTGAGCTCCCTAAAAGAGGAAGGTGGACTCTACAGGGACAAACAGTTGGATGCTGCAATAGCATGGC AGGGGAAGCTCACCACACAAAGAGGAACTCTATCCCAAGAACCCTTATCTCCAAGACTTTCTGAGTGCAGAGG GAGTGCTGAGTGATGGTGTCTGGAGGGTCAAATCCATTCCCAATGGCAAAGGTTCCTCACCACTCCCCACCG CTACAACTCCAAAACCACTTATCCCTACAGAGGCCAGCATCAGGGTCTGGTCAGACTTCCTCAGAGTCCATCTCC ATCCCCGGAGCATCTGTATGATTCAGAAGTACAACCACGATGGGGAAGCAGGTCGGCTGGAGGCTTTTGGCCAAG GGGAAAGTGTCCTAAAGGAACCCAAGTACCAGGAAGAGCTGGÁGGACAGGCTGCATTTCTACGTGGAGGAATGTG ACTACTTGCAGGGCTTCCAGATCCTGTGTGACCTGCACGATGGCTTCTCTGGGGTAGGCGCGAAGGCGGCAGAGC TGCTACAAGATGAATATTCAGGGCGGGGAATAATAACCTGGGGCCTGCTACCTGGTCCCTACCATCGTGGGGAGG CCCAGAGAAACATCTATCGTCTATTAAACACAGCTTTTGGTCTCGTGCACCTGACTGCTCACAGCTCTCTTGTCT GCCCCTTGTCCTTGGGTGGGAGCCTGGGCCTGCGACCCGAGCCACCTGTCAGCTTCCCTTACCTGCATTATGATG CCACTCTGCCCTTCCACTGCAGTGCCATCCTGGCTACAGCCCTGGACACAGTCACTGTTCCTTATCGCCTGTGTT CCTCTCCAGTTTCCATGGTTCATCTGGCTGACATGCTGAGCTTCTGTGGGAAAAAGGTGGTGACAGCAGGAGCAA TCATCCCTTTCCCCTTGGCTCCAGGCCAGTCCCTTCCTGATTCCCTGGTGCAGTTTTGGAGGAGCCACCCCATGGA AAATCTTGGCTCAGTATTTACAACAGCAGCCTGGAGTCATGAGTTCTTCCCATCTGCTGACTCCCTGCA GGGTGGCTCCTTACCCCCACCTCTTCTCAAGCTGCAGTCCACCGGGTATGGTTCTGGATGGTTCCCCCAAGG GAGCAGCAGTGGAGAGCATCCCAGTGTTTGGGGCACTGTGTTCCTCTTCGTCCCTGCACCAGACCCTGGAAGCCT TGGCCAGAGACCTCACCAAACTCGACTTGCGGCGCTGGGCCAGCTTCATGGATGCTGGAGTGGAGCACGATGACG TAGCAGAGCTGCTGCAGGAGCTACAAAGCCTGGCCCAGTGCTACCAGGGTGGTGACAGCCTCGTGGACTAAAGTT CCCAGTGTGGGAGAAAGGAGCTAGTTTGCAATAAAAACAGCTGGATGCAGGAGCCCAGTGTCTTCATGCAGAGGA GCTCAATGTCGCGGGACTACCCAACATATGCACTTTTTACATTTAGAAACACTGTGATTAGACCACAGAA CAATAAATATGTGCCATCAGACC

MAGGAREVLTLQLGHFAGFVGAHWWNQQDAALGRATDSKEPPGELCPDVLYRTGRTLHGQETYTPRLILMDLKGS LSSLKEEGGLYRDKQLDAAIAWQGKLTTHKEELYPKNPYLQDFLSAEGVLSSDGVWRVKSIPNGKGSSPLPTATT PKPLIPTEASIRVWSDFLRVHLHPRSICMIQKYNHDGEAGRLEAFGQGESVLKEPKYQEELEDRLHFYVEECDYL QGFQILCDLHDGFSGVGAKAAELLQDEYSGRGIITWGLLPGPYHRGEAQRNIYRLLNTAFGLVHLTAHSSLVCPL SLGGSLGLRPEPPVSFPYLHYDATLPFHCSAILATALDTVTVPYRLCSSPVSMVHLADMLSFCGKKVVTAGAIIP FPLAPGQSLPDSLVQFGGATPWTPLSACGEPSGTRCFAQSVVLRGIDRACHTSQLTPGTPPPSALHACTTGEEIL AQYLQQQQPGVMSSSHLLLTPCRVAPPYPHLFSSCSPPGMVLDGSPKGAAVESIPVFGALCSSSSLHQTLEALAR DLTKLDLRRWASFMDAGVEHDDVAELLQELQSLAQCYQGGDSLVD

AGGTGAGAGAGGATGTGTGCTGGGGCCTTGGAGGAAGGGGGCCCGAGACCGGGCCTTACTTCTGTAACGATACTGTG GGGTACCCAGTCCTGGCCTGCCAGTGCCCGCTGCTGGTGCCAAGCGTGGACAGAGGAACCTCGAGCCCTTTGC TCCTCCCTCAGAATGAACGGAGACCAGAATTCAGATGTTTATGCCCAAGAAAAGCAGGATTTCGTTCAGCACTTC TCCCAGATCGTTAGGGTGCTGACTGAGGATGAGATGGGGCACCCAGAGATAGGAGATGCTATTGCCCGGCTCAAG GAGGTCCTGGAGTACAATGCCATTGGAGGCAAGTATAACCGGGGTTTGACGGTGGTAGTAGCATTCCGGGAGCTG GTGGAGCCAAGGAAACAGGATGCTGATAGTCTCCAGCGGGCCTGGACTGTGGGCTGGTGTGGAACTGCTGCAA GCTTTCTTCCTGGTGGCAGATGACATCATGGATTCATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAGAAG CCGGGCGTGGGTTTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTACCGCCTGCTGAAGCTCTAT TGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTCTTCCTGCAGAGTTCCTATCAGACTGAGATTGGGCAG ACCCTGGACCTCCTCACAGCCCCCCAGGGCAATGTGGATCTTGTCAGATTCACTGAAAAGAGGTACAAATCTATT GTCAAGTACAAGACAGCTTTCTACCTCCTACCTTCCTATAGCTGCAGCCATGTACATGGCAGGAATTGATGGC GAGAAGGAGCACGCCAATGCCAAGAAGATCCTGCTGGAGATGGGGGGAGTTCTTTCAGATTCAGGATGATTACCTT GTTCAGTGTCTGCAACGGGCCACTCCAGAACAGTACCAGATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAG AAAGTGGCCCGGGTGAAGGCGCTATATGAGGAGCTGGATCTGCCAGCAGTGTTCTTGCAATATGAGGAAGACAGT TACAGCCACATTATGGCTCTCATTGAACAGTACGCAGCACCCCTGCCCCAGCCGTCTTTCTGGGGCTTGCGCGC ACCTT.

MPLSRWLRSVGVFLLPAPYWAPRERWLGSLRRPSLVHGYPVLAWHSARCWCQAWTEEPRALCSSLRMNGDQNSDV
YAQEKQDFVQHFSQIVRVLTEDEMGHPEIGDAIARLKEVLEYNAIGGKYNRGLTVVVAFRELVEPRKQDADSLQR
AWTVGWCVELLQAFFLVADDIMDSSLTRRGQICWYQKPGVGLDAINDANLLEACIYRLLKLYCREQPYYLNLIEL
FLQSSYQTEIGQTLDLLTAPQGNVDLVRFTEKRYKSIVKYKTAFYSFYLPIAAAMYMAGIDGEKEHANAKKILLE
MGEFFQIQDDYLDLFGDPSVTGKIGTDIQDNKCSWLVVQCLQRATPEQYQILKENYGQKEAEKVARVKALYEELD
LPAVFLQYEEDSYSHIMALIEQYAAPLPPAVFLGLARKIYKRK

GGCGAACTGAGGCGAGTGAAGTGGACTCTGAGGGCTACCGCTACCGCCACTGCTGCGGCAGGGGCGTGGAGGGCA ${\tt GAGGGCCGCGGAGGCCGCAGTTGCAAAC} {\tt ATG} {\tt GCTCAGAGCAGACGGCGGAAACCCGTTCGCCGAGCCCAGCGA}$ GCTTGACAACCCCTTTCAGGACCCAGCTGTGATCCAGCACCGACCCAGCCGGCAGTATGCCACGCTTGACGTCTA CAACCCTTTTGAGACCCGGGAGCCACCACCAGCCTATGAGCCTCCAGCCCTGCCCCATTGCCTCCACCCTCAGC TCCCTCCTTGCAGCCCTCGAGAAAGCTCAGCCCCACAGAACCTAAGAACTATGGCTCATACAGCACTCAGGCCTC AGCTGCAGCCACAGCTGAGCTGCTGAAGAAACAGGAGGAGCTCAACCGGAAGGCAGAGGAGTTGGACCGAAG GGAGCGAGAGCTGCAGCATGCTGCCCTGGGGGGCACAGCTACTCGACAGAACAATTGGCCCCCTCTACCTTCTTT TTGTCCAGTTCAGCCCTGCTTTTTCCAGGACATCTCCATGGAGATCCCCCCAAGAATTTCAGAAGACTGTATCCAC GGAAACCAACAATGGCGCAGGCTTTGGGCTTTCTATCCTCTGGGTCCTCCTTTTCACTCCCTGCTCCTTTGTCTG CGTCCAGGATGTGCTCTTTGTCCTCCAGGCCATTGGTATCCCAGGTTGGGGATTCAGTGGCTGGATCTCTGCTCT GGTGGTGCCGAAGGGCAACACAGCAGTATCCGTGCTCATGCTGGTCGCCCCTGCTCTTCACTGGCATTGCTGT GCTAGGAATTGTCATGCTGAAACGGATCCACTCCTTATACCGCCGCACAGGTGCCAGCTTTCAGAAGGCCCAGCA AGAATTTGCTGCTGGTGTCTTCTCCAACCCTGCGGTGCGAACCGCAGCTGCCAATGCAGCCGCTGGGGCTGCTGA ${\tt AAATGCCTTCCGGGCCCCG} \underline{{\tt TGA}} {\tt CCCCTGACTGGGATGCCCTGGCCCTGCTACTTGAGGGAGCTGACTTAGCTCCCCC}$ GTCCCTAAGGTCTCTGGGACTTGGAGAGACATCACTAACTGATGGCTCCTCCGTAGTGCTCCCAATCCTATGGCC

MAQSRDGGNPFAEPSELDNPFQDPAVIQHRPSRQYATLDVYNPFETREPPPAYEPPAPAPLPPPSAPSLQPSRKL SPTEPKNYGSYSTQASAAAATAELLKKQEELNRKAEELDRRERELQHAALGGTATRQNNWPPLPSFCPVQPCFFQ DISMEIPQEFQKTVSTMYYLWMCSTLALLLNFLACLASFCVETNNGAGFGLSILWVLLFTPCSFVCWYRPMYKAF RSDSSFNFFVFFFIFFVQDVLFVLQAIGIPGWGFSGWISALVVPKGNTAVSVLMLLVALLFTGIAVLGIVMLKRI HSLYRRTGASFQKAQQEFAAGVFSNPAVRTAAANAAAGAAENAFRAP

GGTAGTTGGTTGTGGGCACTGGGTTAGAGGTATCACGTGGGGGCACTTTCGTCTTAGCTTTTGGACAAGACGCAG GCTTGACAACCCCTTTCAGCCACCACCAGCCTATGAGCCTCCAGCCCCTGCCCCATTGCCTCCACCCTCAGCTCC CTCCTTGCAGCCCTCGAGAAAGCTCAGCCCCACAGAACCTAAGAACTATGGCTCATACAGCACTCAGGCCTCAGC TGCAGCAGCCACAGCTGAGCTGCTGAAGAAACAGGAGGAGCTCAACCGGAAGGCAGAGGAGTTGGACCGAAGGGA GCGAGAGCTGCAGCATGCTGCCCTGGGGGGCACAGCTACTCGACAGAACAATTGGCCCCCTCTACCTTCTTTTTG TCCAGTTCAGCCCTGCTTTTTCCAGGACATCTCCATGGAGATCCCCCAAGAATTTCAGAAGACTGTATCCACCAT AACCAACAATGGCGCAGGCTTTGGGCTTTCTATCCTCTGGGTCCTCCTTTTCACTCCCTGCTCCTTTGTCTGCTG CCAGGATGTGCTCTTTGTCCTCCAGGCCATTGGTATCCCAGGTTGGGGATTCAGTGGCTGGATCTCTGCTCTGGT GGTGCCGAAGGGCAACACAGCAGTATCCGTGCTCATGCTGGTCGCCCTGCTCTTCACTGGCATTGCTGTGCT AGGAATTGTCATGCTGAAACGGATCCACTCCTTATACCGCCGCACAGGTGCCAGCTTTCAGAAGGCCCAGCAAGA ATTTGCTGCTGGTGTCTTCTCCAACCCTGCGGTGCGAACCGCAGCTGCCAATGCAGCCGCTGGGGCTGCTGAAAA $\tt TGCCTTCCGGGCCCCG\underline{TGA} \tt CCCCTGACTGGGATGCCCTGGCCCTGCTACTTGAGGGAGCTGACTTAGCTCCCGTC$ CCTAAGGTCTCTGGGACTTGGAGAGACATCACTAACTGATGGCTCCTCCGTAGTGCTCCCAATCCTATGGCCATG ACTGCTGAACCTGACAGGCGTGTGGGGAGTTCACTGTGACCTAGTCCCCCCATCAGGCCACACTGCTGCCACCTC ACTGGAACTGAAAAAAAAAAAAAAA

MAQSRDGGNPFAEPSELDNPFQPPPAYEPPAPAPLPPPSAPSLQPSRKLSPTEPKNYGSYSTQASAAAATAELLK KQEELNRKAEELDRRERELQHAALGGTATRQNNWPPLPSFCPVQPCFFQDISMEIPQEFQKTVSTMYYLWMCSTL ALLLNFLACLASFCVETNNGAGFGLSILWVLLFTPCSFVCWYRPMYKAFRSDSSFNFFVFFFIFFVQDVLFVLQA IGIPGWGFSGWISALVVPKGNTAVSVLMLLVALLFTGIAVLGIVMLKRIHSLYRRTGASFQKAQQEFAAGVFSNP AVRTAAANAAAGAAENAFRAP

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CCTGCGGCAGCCGGAGCTCGGGGAGCGGAGCGTGGTGGGGGAGGGGGAGCAGGCGACACAGGAGACAGCGGC TCACCCCACGCCGACCCCTCTCTCTAGACTTATTTCCATCCTTCCCGCTTTTACCCTCCCCACCCGTCC CACTCCGCGGTCCCTCGTGACGCCCCTCGCTTGGCCCCCCCACAGCTGGCGTCCCTCGGCCATGCCCCAGGGG ACCCAGCCAGGGGGTGGGCTCTAGAGCGAGTGGGGTGGAGAGAAAGGACGGGGCCTTGGGGGCCTCTGAGAT ${\tt GCTCCCAAGTGCCAGGGAGGGCGAGGCGAGGCAGGCAGCCAGGCAGCAGGC} {\tt ATG} {\tt ATG} {\tt CTCCCAAGTGCCTAGTGACT}$ CCAGCCGCTCGCTGACCAGCCGGCCCAGCACCAGGGGCCTTACCCACCTCCGCCTCCACCGACCCTGGCTGCAGG ${\tt CCCTGCTTACGCTGGGGCTGGTCCAAGTGCTCCTGGGCATCCTGGTGGTCACCTTCAGCATGGTGGCCTCTTCCG}$ GCATTGTGTCCTGGAAGCGGCCATTCACTCTAGTGATCTCCTTCTTCTCCTTGCTTTCGGTGCTCTGTGTCATGC TTAGCATGGCTGGCTCTGTTCTCTCTGTAAGAATGCTCAACTGGCCCGAGACTTCCAACAGTGCTCTCTGGAAG GAAAGGTCTGTGTGTGCCTCTCTGTTCCCCTCCTCCGGCCCTGTCCAGAGTCGGGGCAGGAACTGAAAGTTG CCCCTAACTCCACCTGTGATGAAGCCCGAGGGGCCCTCAAGAACCTGCTCTTCAGCGTCTGTGGGGCTCACCATTT GTGCCGCTATAATCTGTACACTCTCTGCTATTGTCTGCTGCATCCAAATCTTCTCCCTGGACCTCGTGCATACGC AGCTGGCCCCTGAGCGGTCAGTCTCAGGCCCACTGGGACCTCTGGGCTGCACGTCCCCGCCCCCAGCCCCTCTCC TACACACCATGCTGGACCTGGAGGAATTTGTCCCGCCTGTGCCCCCACCGCCCTACTATCCCCCAGAGTATACCT GCAGCTCAGAAACAGATGCACAGAGCATCACGTACAATGGCTCCATGGACAGCCCAGTGCCCTTGTACCCTACCG ATTGCCCCCCTTCTTATGAGGCAGTCATGGGACTACGAGGAGACAGCCAGGCCACTCTCTTTGACCCTCAGCTTC ACGATGGCTCGTGCATCTGTGAACGAGTGGCCTCCATTGTAGACGTGTCCATGGACAGCGGGTCTCTGGTGCTGT CAGCCATTGGTGACCTCCCTGGGGGCTCTAGCCCGTCGGAGGACTCGTGCCTGCTGGAGCTGCAGGGCTCCGTGC GCTCCGTGGACTACGTTCTCTTTCGCTCCATCCAGCGCAGCCGTGCCGGCTACTGCCTCAGCCTGGACTGTGGCC TGCGGGGCCCCTTCGAGGAAAGCCCCCTGCCACGGCGCCCCCCACGGGCTGCCCGCTCCTATTCCTGCTCTGCCC CTGAAGCTCCACCCCACTGGGTGCCCCCACAGCTGCCCGCAGCTGCCACCGGTTGGAGGGCTGGCCGCCCTGGG TGGGACCCTGCTTCCCCGAGCTGAGGCGGCGGGTCCCCCGGGGAGGGGGCCCCCAGCCGCAGCCCCACCC GAGCCCCGACTCGTCGCTTCAGCGATAGCTCAGGTTCCCTCACCCCACCGGGGCACCGGCCTCCTCATCCGGCAT CCCCACCACCGCTGCTGCCACGGTCCCACAGCGACCCAGGCATCACGACCTCCAGTGACACTGCTGACTTCA GGGACCTTTATACCAAAGTGCTTGAGGAAGAAGCTGCTTCTGTTTCCTCTGCAGATACAGGGCTCTGCTCTGAAG CCTGCCTCTTCCGCCTAGCCCGCTGCCCTTCCCCCAAGTTGCTACGTGCCCGGTCAGCCGAGAAACGGCGCCCTG TGCCCACCTTCCAAAAAGTTCCCCTGCCCTCGGGCCCTGCACCTGCCCACTCCCTGGGGGACCTAAAGGGCAGCT GGCCAGGTCGGGGCCTGGTCACTCGTTTCCTCCAGATATCCAGGAAAGCCCCAGACCCCAGTGGGACTGGAGCTC ATGGACATAAGCAGGTGCCCGGAGCCTGTGGGGCCCGGCCTGGCCGAGAGAGCCTCCACCTTCGCAGCTGCGGAG ATCTGAGCTCTAGCTCTTCCCTGCGGCGTCTCCTGTCTGGCCGCAGGCTGGAGCGTGGTACCCGCCCCACAGCC CTTCTGTCCTGTGCTGCATGGGTATTTAGACTGTGGGGGGAGATGCCCCTTCTTATAGCACTGGAGGAGAAAACA AATTCTTGTCCCCCTCAGAATGAGAGTGGCTCTTTCTGATTTGCAAGGGCACTATGGTCAGGGCAAAGGCATGGC TAGGTGGCCTCTCAGCTCTGCCACCTCTAGCTGCATGACCTTGGGCAAGCTATGTAACCCCAATTGCCTGCTCCA TTAAAGACTGTGAAGGTAGAATGTTTGTAAAGCTCTTAACAGTATGTAAGCCTTCAATAAATTTCAGTTTTCCCC

MMPSPSDSSRSLTSRPSTRGLTHLRLHRPWLQALLTLGLVQVLLGILVVTFSMVASSVTTTESIKRSCPSWAGFS
LAFSGVVGIVSWKRPFTLVISFFSLLSVLCVMLSMAGSVLSCKNAQLARDFQQCSLEGKVCVCCPSVPLLRPCPE
SGQELKVAPNSTCDEARGALKNLLFSVCGLTICAAIICTLSAIVCCIQIFSLDLVHTQLAPERSVSGPLGPLGCT
SPPPAPLLHTMLDLEEFVPPVPPPPPYYPPEYTCSSETDAQSITYNGSMDSPVPLYPTDCPPSYEAVMGLRGDSQA
TLFDPQLHDGSCICERVASIVDVSMDSGSLVLSAIGDLPGGSSPSEDSCLLELQGSVRSVDYVLFRSIQRSRAGY
CLSLDCGLRGPFEESPLPRRPPRAARSYSCSAPEAPPPLGAPTAARSCHRLEGWPPWVGPCFPELRRRVPRGGGR
PAAAPPTRAPTRRFSDSSGSLTPPGHRPPHPASPPPLLLPRSHSDPGITTSSDTADFRDLYTKVLEEEAASVSSA
DTGLCSEACLFRLARCPSPKLLRARSAEKRRPVPTFQKVPLPSGPAPAHSLGDLKGSWPGRGLVTRFLQISRKAP
DPSGTGAHGHKQVPRSLWGRPGRESLHLRSCGDLSSSSSLRRLLSGRRLERGTRPHSLSLNGGSRETGL

CAGTGCCCCACAGCTCTTCAGGCCCTTCCTGTGCCTGGCTGCCCTCCCACCCTACCCTTTTGTACCTCTGAGAAG GCTCTGGCCCCACGCACAGCCCCACTGTCACCAGGGCCAGTATCTGTCTCAGGGACCTCCTATCCAGAGCCTGAG CCAGCCCCAGCCCCAGCTCCAGCTGCTCCATCTGAACCTGTATCTTCTTCCAAGCCACCCATTACCCTC TTGGAGTCAGACTCACGCATCTCCAAAGAAGAACTTTTGAGAGCCCAGGCGCTGAGAGAGCAGGGTCAGACACTC CCGAGCCTCTCGGTACAGCTGTAGGGGCGACACAGGTAGGCTTGCAGCTGCGGGAACAGTGCCACCTCCGCACCT AAGCACTCCCATTCCTGGCCAGCATCCTTGGGGCTCATCTCATACAATAGCCCCCGGTCTCAGAGCTACCTCCTT CTCCAGCTCTTCCTCGTCCTCAGGCCTGTGCTCCCCAGTCAGCAGCTGTAGCCGTTCCATGTACTGCCGCTGCAT GCGGCCAGGCAGGAAGAAGTTGAGGGGAAAGGGCATAGCCTCTGCATACCACTTCCGGGTCACTTCTACGTAGTT TGTCTGATTCAAGGTGGGCTTCTGACCTCCATGCTCTCCTGAGTCTCTGTGTGGGTCTGTGTGTTCCCGTCCCCT CCCCGGCTGGCCATGGATGCTGGGAGGTCTGGGCACACTCACCAGCACCGGGATCAACTTCTCCTCCAGGAGAGA CATGAAGGCCAGGGTGTCTGCCCCTTGCTGAGCTGACAGATCATAATCAGCATTGTACTTCTGTGGAGGAAATAT CCTGTTGCTGTTGGCAAAAAGCCTGGGCCTTGGAGCCCGCTGGCCGTCAAGGTCCTGGGCCCATTGAGAAGAAGG $AAGAAAGGTTGGGCCGCAAACTAGGAGCAGCTCCCAGAATTTCCATGGAAAGCTGGAACAATGCCTGC\underline{TGA}CAGC$ AACTTTCTAACAGTAACTTTCCCGACCCAGACACCACAAAGCTAGCACAACGGAGCTCAGATGCAGGCTAGGACT CGGTCCATGCCTCAGGAACCAGGGAAAGCCATCCTCACACTCCCTGGATCCAGGGAACCCACGCCCAGGGCCCCC ACACATTCCATCCATACCCCCAGGTCTCAGCCTGCCCTACCTTCCCAGGCTCCAGTCCCTGTTCCTCAGCATCCC CCACCACATCCTGAGTAAGCTTTGTCCCCAGATAACCTCTTCAGCATGATCCTTAAATCTCCCTAAGCCTCAGTT TCTCCCCTGTGGAATGGGGGTAAGAATCTCTTTCTCTGAATGCCCCTGTGTTAGGAAATAATTTAGAATACTTCG GAAACAAAAAGCTCTGTTCACACCTAAGCAATCAGGGCAGTGGCCCTGGCCTTGCCAGGAACTTAGGCTTTTATC TGGATCCTCTTTCCAGGCCTCTCAATTAATTCCCCAGGTCCTTAACCTTTGGGAAATTAGAAATTAGGAAGAGTG TCCCACTTCTGACACTGTGTTCCCTCTTGGAACCTGACCGTCAATGCTAGAAGAACCCTTGGAAAAACATGCTGGC CCAGCCCTCTAGTTTTACAAATAAGGGAGTGCACAGCCCTGAGAGGTTACATGGCCTGCCCAAGATCACGCAGTC AATGGCAGAGTAAAGAGCATAGCCTAGGCCTCCCCACTCCTCTAGTAATGCTCTTTCATCTTCTCCAACCTGGCT CTAAGCCTTGTCCATCCTGAGCCCCATATCTAGCCCAACCTAGTCCCTGAAAACAAGAAGTGGCCCTTAGAAATC CTGACAGGCAGAAGGTACCGTGCCTCTGGATATCCCCACAGTGCCCTGAGCTGCATCTCTTGCCGACTGCTTTAA TACATCACAGTGACATTGTGTGTGTCTCTGCCACCAGACTATTGCTCCTTGATGCTCTGGGTCACCTGCATCTAG CATGGCATATATCTAGTGCTCAATAAATGTGTATTGTACGG

 ${\tt MAWTLGSCKGTSPGRKESCLVPPSLASECSGGTARNFSCQGPLAWAQPVACCCWQKAWALEPAGRQGPGPIEKKE} \\ {\tt ERLGRKLGAAPRISMESWNNAC}.$

AAGCCCCAGCCCGGCCTCCGGCCGCCGCCACCGCCCTGTTTTGTTTCCATGGCGACAGGCGGCGCAGGG CCCGCTCCAAACATAACGCGCTGTGGAAAACATGCTGCTCGGGGGACCCCCCCGCAGTCCCCGCTCGGGGACGAG CCCCAAGGGGCCCTGGAGCAGTACAGGCCACGTGCAGTTTGGCAAGAGCCCCCAGACCTGGCCCAGGCGCACAAG ACCCCGCTCTCCAGAGCCTGCCGCGCCTTCAAGGGTTCGGGGGCTCCACTTGGACGAGGCGCCGTGACTCTCCGAG CCGCGGCCCAGTCCCCGCAGTTCAGCTGCCAGTCGGGCCAGAAGAAGCCTCGCCTCCCCGGGGATCTCCCCAGG AGTGTTTCCGGGACAGAGGGGGGCAAGATGGCGGCGCCCATGGAGCTGTTCTGCTGGTCAGGGGGGCTGGGGGGCT GCCGTCAGTGGACCTGGACAGCCTGGCCGTGCTGACCTATGCCAGATTTACTGGTGCTCCACTGAAGGTACACAA GATCAGCAACCCCTGGCAGAGCCCTTCAGGAACTCTGCCTTCCGGACCAGTCATGGAGAGGTCATCTCAGT TCCACACAAGATCATCACCCACCTTCGAAAAGAGGTACATACTTTTTGGATAGACACCAAGAACTACGTGGAAGT CATGGAACGGCTACAGCTGCTGACTGGGGAGCACAGGCCTGAGGACGAGGAAGAGCTGGAGAAGGAGCTGTACCG AGAGGCTCGGGAGTGTCTGACCCTGCTCTCTCAGCGCCTGGGCTCTCAAAAGTTCTTCTTTGGAGATGCCCCTGC CTCCTTGGACGCCTTCGTCTTCAGCTACTTGGCCCTGCTGCTGCAGGCAAAGCTGCCCAGTGGGAAGCTGCAGGT $\tt CCACCTGCGTGGGCTGCACAACCTCTGTGCCTATTGTACCCACATTCTCAGTCTCTACTTCCCCTGGGATGGAGC$ GGCAACGCCTGCTCGTGGCCCCAGGCACCCGGACCCTGGGCATGGCTGAGGAGGATGAAGAGGAATGATTTGTCC TCACGCTCCCAAGACTGGTTTTTCTACTCTCATGCATTCCAGAGGCCCCCGTGCCTCCTCGTTGTTGGTACAGCC GGACACGGGTGTGCCACCCAGAATAAAGCCACTCACACTG

GCCGGAAGCGCGGAGACCATGTAGTGAGACCCTCGCGAGGTCTGAGAGTCACTGGAGCTACCAGAAGCATCAT GGGGCCCTGGGGAGAGCCAGAGCTCCTGGTGTGGCGCCCCGAGGCGGTAGCTTCAGAGCCTCCAGTGCCTGTGGG GCTGGAGGTGAAGTTGGGGGCCCTGGTGCTGCTGCTGGTGCTCACCCTCTCTGCAGCCTGGTGCCCATCTGTGT GCTGCGCCGGCCAGGAGCTAACCATGAAGGCTCAGCTTCCCGCCAGAAAGCCCTGAGCCTAGTAAGCTGTTTCGC AGCCTTGCACGTGACGCTCCAGTTCCCACTGCAAGAGTTCATCCTGGCCATGGGCTTCTTCCTGGTCCTGGTGAT GGAGCAGATCACACTGGCTTACAAGGAGCAGTCAGGGCCGTCACCTCTGGAGGAAACAAGGGCTCTGCTGGGAAC AGTGAATGGTGGGCCGCAGCATTGGCATGATGGGCCAGGGGTCCCACAGGCGAGTGGAGCCCCAGCAACCCCCTC AGCCTTGCGTGCCTGTGTACTGGTGTTCTCCCTGGCCCTCCACTCCGTGTTCGAGGGGCTGGCGGTAGGGCTGCA GCGAGACCGGGCTCGGGCCATGGAGCTGTGCCTGGCTTTGCTGCTCCACAAGGGCATCCTGGCTGTCAGCCTGTC TCTAGGCATCGGCTGGGTGCAGCTCTGGCAGAGTCGGCAGGACCTCTGCACCAGCTGGCCCAGTCTGTGCTAGA GGGCATGGCAGCTGGCACCTTTCTCTATATCACCTTTCTGGAAATCCTGCCCCAGGAGCTGGCCAGTTCTGAGCA AAGGATCCTCAAGGTCATTCTGCTCCTAGCAGGCTTTGCCCTGCTCACTGGCCTGCTCTTCATCCAAATCTAGGG TAGGAAGGAAAGGGAAGGGAAATACTGAGGACCAAAAAGTTCTCTGGGAGCTAAAGATAGAGCCTTTGGGGCTA TCTGACTAATGAGAGGGAAGTGGGCAGACAAGAGGCTGGCCCCAGTCCCAAGGAACAAGAGATGGTCAAGTCGCT AGAGACATATCAGGGGACATTAGGATTGGGGAAGACACTTGACTGCTAGAATCAGAGGTTGGACACTATACATAA GGACAGGCTCACATGGGAGGCTGGAGGTGGGTACCCAGCTGCTGTGGAACGGGTATGGACAGGTCATAAACCTAG AGTCAGTGTCCTGTTGGTCCTAGCCCATTTCAGCACCCTGCCACTTGGAGTGGACCCCTCCTACTCTTCTTAGCG CCTACCCTCATACCTATCTCCCTCCCATCTCCTAGGGGACTGGCGCCAAATGGTCTCTCCCTGCCAATTTTG TGTACCCTAGGAATATGGGGACATGGACATGGTGTCCCATGCCCAGATGATAAACACTGAGCTGCCAAAACATTT GTGCATAGGGACATATTCTTTAGAATCTATTTTATTAACTGACCTGTTTTGGGACCTGTTACCCAAATAAAAGAT GTTTCTAG

 ${\tt AGAAAGAAAAGGTGTAGTGTTTGGGGAGGTCAACGGGCTATGCTGGCTTGACAGGGCTGGGCTCTTCAGAACAGA}$ GTCCTGGAGCTGGGACTCCACTGCCCCCCCCAGAGGTTCCGGTAACTAGGCTACAGGAACAGGGACTGCAAGGC TGGAAGTCCGGTGGGGACCGTGGCCTTCAAGAGAGTGAGCCTGAAGATTTCTTGAAGCTTTTCATTGAT ${\tt CCCAATGAGGTGTACTGCTCAGAAGCATCTCCTGGCAGTGACAGTGGCATCTCTGAGGACCCCTGCCATCCAGAC}$ AGTCCCCTGCCCCAGGGCAACCAGTTCTCCTATGCTCTATGAGGTTGTCTATGAGGCAGGGGCCCTGGAGAGG ${\tt CCTGATTCCTGCATGGTCAGTGAGCTGCCCTTTGATGCTCATGCCCACATCCTGCCCAGAGCAGGCACCGTAGCC}$ ${\tt CCAGTGCCCTGTACAACCCTGCTGCCCTGTCAAACCCTGTTCCTGACCGATGAGGAGAAGCGTCTGCTGGGGGCAG}$ ATCCGTAACAAGCAGTCAGCTCAGGACAGTCGGCGGCGGAAGAAGGAGTACATTGATGGGCTGGAGAGCAGGGTG GCAGCCTGTTCTGCACAGAACCAAGAATTACAGAAAAAGTCCAGGAGCTGGAGAGGCACAACATCTCCTTGGTA GCTCAGCTCCGCCAGCTGCAGACGCTAATTGCTCAAACTTCCAACAAAGCTGCCCAGACCAGCACTTGTGTTTTTG GAGGATTACCAGCCTCACGGAGTGACTTCCAGAAATATCCTGACCCACAAGGACGTAACAGAAAATCTGGAGACC CAAGTGGTAGAGTCCAGACTGAGGGAGCCACCTGGAGCCAAGGATGCAAATGGCTCAACAAGGACACTGCTTGAG GACCTTCCTGGCCCACTTCCTGATCACAAGGAATCCTGGGCTTCCTTATGGCTTTGCTTCCCACTGGGATTCCTA $\tt CTTAGGTGTCTGCCCTCAGGGGTCCAAATCACTTCAGGACACCCCAAGAGATGTCCTTTAGTCTCTGCCTGAGGC$ CTAGTCTGCATTTGTTTGCATATATGAGAGGGTACCTCAAATACTTCTGTTATGTATCTGTGATTTTATTTCTTC

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MDLGIPDLLDAWLEPPEDIFSTGSVLELGLHCPPPEVPVTRLQEQGLQGWKSGGDRGCGLQESEPEDFLKLFIDP NEVYCSEASPGSDSGISEDPCHPDSPPAPRATSSPMLYEVVYEAGALERMQGETGPNVGLISIQLDQWSPAFMVP DSCMVSELPFDAHAHILPRAGTVAPVPCTTLLPCQTLFLTDEEKRLLGQEGVSLPSHLPLTKAEERVLKKVRRKI RNKQSAQDSRRRKKEYIDGLESRVAACSAQNQELQKKVQELERHNISLVAQLRQLQTLIAQTSNKAAQTSTCVLI LLFSLALIILPSFSPFQSRPEAGSEDYQPHGVTSRNILTHKDVTENLETQVVESRLREPPGAKDANGSTRTLLEK MGGKPRPSGRIRSVLHADEM

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MLAGAGRPGLPQGRHLCWLLCAFTLKLCQAEAPVQEEKLSASTSNLPCWLVEEFVVAEECSPCSNFRAKTTPECG PTGYVEKITCSSSKRNEFKSCRSALMEQRLFWKFEGAVVCVALIFACLVIIRQRQLDRKALEKVRKQIESI

469/6881 FIGURE 438

GAATTCGAGGATCCGGGTACCATGGGAGGAAAACTTCTTCCTGGCCTGGGCTCCGTGCCGCTCTGTTTGCCAACC CTACGACCACCTCTTCAAGTTGCTGCTGATCGGGGGACTCGGGGGTGGGCAAGACTTGTCTGATCATTCGCTTTGC ${\tt AGAGGACAACTTCAACAACACTTACATCTCCACCATCGGAATTGATTTCAAGATCCGCACTGTGGATATAGAGGG}$ GAAGAAGATCAAACTACAAGTCTGGGACACGGCTGGCCAAGAGCGGTTCAAGACAATAACTACTGCCTACTACCG ${\tt TGGAGCCATGGGCATTATCCTAGTATACGACATCACGGATGAGAAATCTTTCGAGAATATTCAGAACTGGATGAA}$ AAGCATCAAGGAGAATGCCTCGGGTGGGGTGGAGCGCCTCTTGCTGGGGAACAAATGTGACATGGAGGCCAAGAG GAAGGTGCAGAAGGAGCCGATAAGTTGGCTCGAGAGCATGGAATCCGATTTTTCGAAACTAGTGCTAAATC CAGTATGAATGTGGATGAGGCTTTTAGTTCCCTGGCCCGGGACATCTTGCTCAAGTCAGGAGGCCGGAGATCAGG ${\tt AAACGGCAACAAGCCTCCCAGTACTGACCTGAAAACTTGTGACAAGAAGAACACCAACAAGTGCTCCCTGGGC\underline{\tau_G}$ <u>A</u>GGACCCTTTCTTGCCTCCCCACCCGGAAGCTGAACCTGAGGGAGACAACGGCAGAGGGAGTGAGCAGGGGAGA AATAGCAGAGGGCTTGGAGGGTCACATAGGTAGATGGTAAAGGGAAATGAGGAGAAAAAGGGAAAAAGGGAAAAAG GGTAGGAAGAGGGGGGGAGGAAGGAAGGAGAGAGAGTGCCTCAGGCTTCAGACCTTACCTGGGTTTTCAGGGCA AACATAAATGTAAATACACTGATTTATTCTGTTACTAGATCAGGTTTTAGGGTCCTGCAAAAGGCTAGCTCGGCA AAAAAAAAAAACCATGGTACCCGGATCCTCGAATTC

MAKAYDHLFKLLLIGDSGVGKTCLIIRFAEDNFNNTYISTIGIDFKIRTVDIEGKKIKLQVWDTAGQERFKTITT AYYRGAMGIILVYDITDEKSFENIQNWMKSIKENASAGVERLLLGNKCDMEAKRKVQKEQADKLAREHGIRFFET SAKSSMNVDEAFSSLARDILLKSGGRRSGNGNKPPSTDLKTCDKKNTNKCSLG

CCTTTCCGGCGGTGACGACCTACGCACACGAGAACATGCCTCTCGCAAAGGATCTCCTTCATCCCTCTCCAGAAG AGGAGAAGAAGAACACAAGAAGAACACCAGGTGCAGAGCCCCAATTCCTACTTCATGGATGTGAAATGCCCAG GATGCTATAAAATCACCACGGTCTTTAGCCATGCACAAACGGTAGTTTTGTGTTTGGCTGCTCCACTGTCCTCT GCCAGCCTACAGGAGGAAAAGCAAGGCTTACAGAAGGATGTTCCTTCAGGAGGAAGCAGCACTAAAAGCACTCTG AGTCAAGATGAGTGGGAAACCATCTCAATAAACACATTTTGGAT

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 ${\tt MPLAKDL} \\ {\tt HPSPEEEKRKHKKKRLVQSPNSYFMDVKCPGCYKITTVFSHAQTVVLCVGCSTVLCQPTGGKARLTE} \\ {\tt GCSFRRKQH} \\$

ACTCAGGCAGCCCCTTCTTTCTTGCCCCAGTCTCCAGTTCTCCAGTGTTCACAGGTGAGCCTACCAACAGCC ACTGCTCATGATGGAGGCCATCAAGAAAAAGATGCAGATGCTGAAGTTAGACAAGGAGAATGCTCTGGATCGGGC AGAGCAAGCTGAAGCTGAGCAGAAGCAGGCAGAAGAAGAAGAAGTAAACAGCTGGAGGATGAGCTGGCAGCCATGCA GAAGAAGCTGAAAGGGACAGAGGATGAGCTGGACAAGTATTCTGAAGCTTTGAAGGATGCCCAGGAGAAGCTGGA ACTGGCAGAGAAGAAGGCTGCTGATGCTGAGGCTGAGGTGGCCTCCTTGAACCGTAGGATCCAGCTGGTTGAAGA AGAGCTGGACCGTGCTCAGGAGCGCCTGGCCACTGCCCTGCAAAAGCTGGAAGAAGCTGAAAAAGCTGCTGATGA ACTCAAAGAAGCTAAGCACATTGCAGAAGAGGCAGATAGGAAGTATGAAGAGGTGGCTCGTAAGTTGGTGATCAT GAAGAATGTCACCAACAACCTCAAGTCTCTTGAGGCTCAGGCGGAGAAGTACTCTCAAAAAGAAGATAAATATGA GGAAGAATCAAGATTCTTACTGATAAACTCAAGGAGGCAGAGACCCGTGCTGAGTTTGCTGAGAGATCGGTAGC CAAGCTGGAAAAGACAATTGATGACCTGGAAGATGAGCTCTATGCCCAGAAACTGAAGTACAAGGCCATTAGCGA ${\tt GGAGCTGGACCACGCCCTCAATGACATGACCTCTATA} {\color{red}{\textbf{TAA}}} {\color{blue}{\textbf{TTATCACCGTTTCTGCTCTGTTCTGGATCTGCCCC}}$ CATTAGGATGGGGGAGCAAAAAGCAACTTATGTATTTTCTTCCACCCCCACCCCAAATTAAAATGTTAAGCTGCT GGA

MMEAIKKKMQMLKLDKENALDRAEQAEAEQKQAEERSKQLEDELAAMQKKLKGTEDELDKYSEALKDAQEKLELA EKKAADAEAEVASLNRRIQLVEEELDRAQERLATALQKLEEAEKAADESERGMKVIENRALKDEEKMELQEIQLK EAKHIAEEADRKYEEVARKLVIIEGDLERTEERAELAESKCSELEEELKNVTNNLKSLEAQAEKYSQKEDKYEEE IKILTDKLKEAETRAEFAERSVAKLEKTIDDLEDELYAQKLKYKAISEELDHALNDMTSI

 $\tt CTGGCTTGGTCTTCCCCCGTAAGGAAATGGCCGGGGAGCTCCAGGGGGACCCAGGCGCCGTCGCTTCGGCGGAGCT$ ${\tt GGGCTGACCAGCCAGGACAGCGGGGTAAACCCGAACAATTCTGCGCGAGGTAGGGAGGCC} \underline{{\tt ATG}} {\tt GCGTCCGGCAGT}$ AACTGGCTCTCCGGGGTGAATGTCGTGCTGGTGATGGCCTACGGGAGCCTGGACTTGAAAGAGGAGATTGATATT CGACTCTCCAGGGTTCAGGATATCAAGTATGAGCCCCAGCTCCTTGCAGATGATGATGCTAGACTACTACAACTG GAAACCCAGGGAAATCAAAGTTGCTACAACTATCTGTATAGGATGAAAGCTCTGGATGCCATTCGTACCTCTGAG ATCCCATTTCATTCTGAAGGCCGGCATCCCCGTTCCTTAATGGGCAAGAATTTCCGCTCCTACCTGCTGGATCTG CGAAACACTAGTACGCCTTTCAAGGGTGTACGCAAAGCACTCATTGATACCCTTTTGGATGGCTATGAAACAGCC GTTAAAGCACGAATTGGGAGCTCTCAGCGACATCACCAGTCAGCAGCCAAAGACCTAACTCAGTCCCCTGAGGTC TCCCCAACAACCATCCAGGTGACATACCTCCCCTCCAGTCAGAAGAGTAAACGTGCCAAGCACTTCCTTGAATTG ${\tt AAGAGCTTTAAGGATAACTATAACACTTTGGAGAGTACTCTG} \underline{{\tt TGA}}{\tt CGGAGCTGAAGGACTCTTGCCGTAGATTAA}$ GCCAGTCAGTTGCAATGTGCAAGACAGGCTGCTTGCCGGGCCGCCCTCGGAACATCTGGCCCAGCAGGCCCAGAC TGTATCCATCCAAGTTCCCGTTGTATCCAGAGTTCTTAGAGCTTGTGTCTAAAGGGTAATTCCCCAACCCTTCCT TATGAGCATTTTTAGAACATTGGCTAAGACTATTTTCCCCCCAGTAGCGCTTTTTTCTGGATTTGCATTCGGGTGT TATTCTTAATGTTTCTGTCAAAGCTTCTTAAAAATCTTCACTTGGTTTCAGCCATAGTTCACCTTCCCTGTTCCA GGTTTATTTAATTCCAAAGGTGAGAGTTGGAGTGAGATGTCTTCCATATCTATACCTTTGTGCACAGTTGAATGG GAACTGTTTGGGTTTAGGGCATCTTAGAGTTGATTGATGGAAAAAGCAGACAGGAACTGGTGGGAGGTCAAGTGG GGAAGTTGGTGAATGTGGAATAACTTACCTTTGTGCTCCACTTAAACCAGATGTGTTGCAGCTTTCCTGACATGC AAGGATCTACTTTAATTCCACACTCTCATTAATAAATTGAATAAAAGGGAATGTTTTGGCACCTGATATAATCTG CCAGGCTATGTGACAGTAGGAAGGAATGGTTTCCCCTAACAAGCCCAATGCACTGGTCTGACTTTATAAATTATT

 ${\tt MASGSNWLSGVNVVLVMAYGSLDLKEEIDIRLSRVQDIKYEPQLLADDDARLLQLETQGNQSCYNYLYRMKALDAIRTSEIPFHSEGRHPRSLMGKNFRSYLLDLRNTSTPFKGVRKALIDTLLDGYETARYGTGVFGQNEYLRYQEALSELATAVKARIGSSQRHHQSAAKDLTQSPEVSPTTIQVTYLPSSQKSKRAKHFLELKSFKDNYNTLESTL$

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CCCGACTAAGTGACTTAAACTCCCACCTACTCCTGGAATAAGGAGTCAAAGCCCGGATAGGCGCAGTATTCTACC TTGTAAATACTGTTATTTGTATATACTGTAAATGATGACATCGGTGGGCACTAACCGAGCCCGGGGAAACTGGGA ACAACCTCAAAACCAAAACCAGACACAGCACAAGCAGCGGCCACAGGCCACTGCAGAACAAATTAGACTTGCACA CCCAGACACGCATTCCTGGGAGATGGTCGGGAAGAAGAAGGGAGTCTCAGGCCAGAAGGATGGTGGCCAGACGGA ATCCAATGAGGAAGGCAAAGAAAATCGAGACCGGGACAGAGACTATAGTCGGCGACGTGGTGGGCCACCAAGACG GGGGAGAGGTGCCAGCCGTGGACGAGAGTTTCGAGGTCAGGAAAATGGATTGGATGGCACCAAGAGTGGAGGGCC TTCTGGAAGAGGAACAGAAAGAGGCAGAAGGGGCCGTGGCCGAGGCAGGGTGGCTCTGGTAGGCGAGGAAG CAATAGCAGCGGCAATACGTGGAACAACACTGGCCACTTTGAACCAGATGATGGGACGAGTGCATGGAGGACTGC AACAGAGGAGTGGGGGACTGAAGATTGGAATGAAGATCTTTCTGAGACCAAGATCTTCACTGCCTCTAATGTGTC TTCAGTGCCTCTGCCTGCGGAGAATGTGACAATCACTGCTGGTCAGAGAATTGACCTTGCTGCTGGGGAA GACACCATCTACAATGGAGAATGATTCATCTAATCTGGATCCGTCTCAGGCTCCTTCTCTGGCCCAGCCTCTGGT GTTCAGTAATTCGAAGCAGACTGCCATATCACAGCCTGCTTCAGGGAACACATTTTCTCATCACAGTATGGTGAG CATGTTAGGGAAAGGATTTGGTGATGTCGGTGAAGCTAAAGGCGGCAGTACTACAGGCTCCCAGTTCTTGGAGCA ATTCAAGACTGCCCAAGCCCTGGCTCAGTTGGCAGCTCAGCATTCTCAGTCTGGAAGCACCACCACCTCCTCTTG GGACATGGGCTCGACGACACAATCCCCATCACTGGTGCAGTATGATTTGAAGAACCCAAGTGATTCAGCAGTGCA CAGCCCCTTTACAAAGCGCCAGGCTTTTACCCCATCTTCAACCATGATGGAGGTGTTCCTTCAGGAGAAGTCACC TGCAGTGGCTACCTCCACAGCTGCACCTCCACCTCCGTCTTCTCCTCTGCCAAGCAAATCCACATCGGCTCCACA GATGTCGCCTGGATCTTCAGACAACCAGTCCTCTAGCCCTCAGCCGGCTCAGCAGAAACTGAAACAGCAGAAGAA AAAAGCCTCCTTGACTTCTAAGATTCCTGCTCTGGCTGTGGAGATGCCTGGCTCAGCAGATATCTCAGGGCTAAA CCTGCAGTTTGGGGCATTGCAGTTTGGGTCAGAGCCTGTCCTTTCTGATTATGAGTCCACCCCCACCACGAGCGC CTCTTCAAGCCAGGCTCCAAGTAGCCTGTATACCAGCACGGCCAGTGAATCATCCTCTACAATTTCATCTAACCA GAGTCAGGAGTCTGGTTATCAGAGCGGCCCAATTCAGTCGACAACCTATACCTCCCAAAATAATGCTCAGGGCCC TCTTTATGAACAGAGATCCACAGACTCGGCGGTACCCCAGCTCCATCTCTTCATCACCCCAAAAGGACCTGAC TCAGGCAAAGAATGGCTTCAGTTCTGTGCAGGCCACGCAGTTACAGACCACACAATCTGTTGAAGGTGCTACAGG CTCTGCAGTGAAATCTGATTCACCTTCCACTTCTAGCATCCCCCCTCTCAATGAAACGGTATCTGCAGCTTCCTT ACTGACGACAACCAATCAGCATTCATCCTCCTTGGGTGGCTTGAGCCACAGTGAGGAGATTCCAAATACTACCAC CACACAACACAGCAGCACGTTATCTACGCAGCAGAATACCCTTTCATCATCAACATCTTCTGGGCGCACTTCGAC ATCCACTCTTTTGCACACAAGTGTGGAGAGTGAGGCGAATCTCCATTCTTCCTCCAGCACTTTTTCCACCACATC CAGCACAGTCTCTGCACCTCCCCAGTGGTCAGTGTCTCCTCCAGTCTCAATAGTGGCAGTAGCCTGGGCCTCAG CCTAGGCAGCAACTCCACTGTCACAGCCTCGACTCGAAGCTCAGTTGCTACGACTTCAGGAAAAAGCTCCTCCCAA CCTCCCTCCTGGGGTCCCGCCGTTGTTGCCTAATCCGTATATTATGGCTCCAGGGCTGTTACATGCCTACCCGCC ACAAGTATATGGTTATGATGACTTGCAGATGCTTCAGACAAGATTTCCATTGGATTACTACAGCATCCCATTTCC CACACCCACTACTCCGCTGACTGGGAGGGATGGTAGCCTGGCCAGCAACCCTTATTCTGGTGACCTCACAAAGTT CGGCCGTGGGGATGCCTCCCCCAGCCCCGGCCACAACCTTGGCCCAACCCCAACAGAACCAGACGCAGACTCA CCATACCACGCAGCAGACATTCCTGAACCCGGCGCTGCCTCCTGGCTACAGTTACACCAGCCTGCCATACTATAC AGGGGTCCCGGGCCTCCCAGCACCTTCCAGTATGGGCCTGCTGTGTTCCCTGTGGCTCCTACCTCTTCCAAGCA GCATGGTGTGAATGTCAGTGTGAATGCATCGGCCACCCCTTTCCAACAGCCGAGTGGATATGGGTCTCATGGATA ${\tt CAACACTGGAAGAAAATATCCACCCCTTACAAGCATTTCTGGACGGCTGAGAGC\underline{{\tt TAA}}{\tt TTTGGCCCAAGGCTGGG}$ GGCTGTGTTTTGTGTGTGTGTATAAATTTGCACTGAAGTCTTGTTTCAGAAACCAGACCACTGAGGAGAGCCTGC TGAGCTGAGGCCATGGCCTGCGTGGCTTGGGGAAATGAGTTGGTGGATACCTTCTGGGCTTTTGAACTTGCCCCT CCCCCATTTCCCTCTCCCCCATGTGTCTGACCCTGTCTTACCCATTTCAAGTTCAAGCGGTGCAGCACCTTCGAA GCATCAATGCACACCTGCTGTTGCTTTTGATTTCTGGAAGGCATGTAGTTTCAACTTGTAACAAAAATATTTG TAGTCTTCAATAAACTGTGGTATTTCTTTAGCTAAC

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MMTSVGTNRARGNWEQPQNQNQTQHKQRPQATAEQIRLAQMISDHNDADFEEKVKQLIDITGKNQDECVIALHDC
NGDVNRAINVLLEGNPDTHSWEMVGKKKGVSGQKDGGQTESNEEGKENRDRDRDYSRRRGGPPRRGRGASRGREF
RGQENGLDGTKSGGPSGRGTERGRRGRGRGRGRGRGRGRGRFSAQGMGTFNPADYAEPANTDDNYGNSSGNTWNNT
GHFEPDDGTSAWRTATEEWGTEDWNEDLSETKIFTASNVSSVPLPAENVTITAGQRIDLAVLLGKTPSTMENDSS
NLDPSQAPSLAQPLVFSNSKQTAISQPASGNTFSHHSMVSMLGKGFGDVGEAKGGSTTGSQFLEQFKTAQALAQL
AAQHSQSGSTTTSSWDMGSTTQSPSLVQYDLKNPSDSAVHSPFTKRQAFTPSSTMMEVFLQEKSPAVATSTAAPP
PPSSPLPSKSTSAPQMSPGSSDNQSSSPQPAQQKLKQQKKKASLTSKIPALAVEMPGSADISGLNLQFGALQFGS
EPVLSDYESTPTTSASSSQAPSSLYTSTASESSSTISSNQSQESGYQSGPIQSTTYTSQNNAQGPLYEQRSTQTR
RYPSSISSSPQKDLTQAKNGFSSVQATQLQTTQSVEGATGSAVKSDSPSTSSIPPLNETVSAASLLTTTNQHSSS
LGGLSHSEEIPNTTTTQHSSTLSTQQNTLSSSTSSGRTSTSTLLHTSVESEANLHSSSSTFSTTSSTVSAPPPVV
SVSSSLNSGSSLGLSLGSNSTVTASTRSSVATTSGKAPPNLPPGVPPLLPNPYIMAPGLLHAYPPQVYGYDDLQM
LQTRFPLDYYSIPFPTPTTPLTGRDGSLASNPYSGDLTKFGRGDASSPAPATTLAQPQQNQTQTHHTTQQTFLNP
ALPPGYSYTSLPYYTGVPGLPSTFQYGPAVFPVAPTSSKQHGVNVSVNASATPFQQPSGYGSHGYNTGRKYPPPY
KHFWTAES

MSRALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIENPADVS VISSRNTGQRAMLKFAAATGATPIAGHFTPGTFTNRIQAAFREPQLPVVTDPRADHQPLTEVSYVNLPTIALCNT DSPLRYVDIAIPCNNKGAHSVGWMWWMLAQEVLRMRGTISREHPWEVMPDLCFYRDPEEIEKEEQAAAEEAVTKE EFQGEWTAPAPEFTATQPEVADWSEGLQVPSVSIQSSLLKTGALSLPRKTGLQLPLLRPLNGVGATTEWS

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CGAAATTGAACCGGAGCCATCTTGGGCCCGGCGCGCAGACCCGCGGAGTTTCCCGTGCCGACGCCCCGGGGCCAC TTCCAGTGCGGAGTAGCGGAGGCGTGGGGGCCTCGAGGGGCTGGCGCCCAGCGGTCGGGCCAGGGTCGTGCC GCCGGCGGGTCGGGCCAATGCCTCGCGGGCGCAATGAATCCGCGGCAGGGGTATTCCCTCAGCGGATACTA CACCCATCCATTTCAAGGCTATGAGCACAGACAGCTCAGGTACCAGCAGCCTGGGCCAGGATCTTCCCCCAGTAG TTTCCTGCTTAAGCAAATAGAATTTCTCAAGGGGCAGCTCCCAGAAGCACCGGTGATTGGAAAGCAGACACCGTC GGACATCAGGGGTGTCCCCAGGGGCGTGCATCTCAGAAGTCAGGGGCTCCAGAGAGGGGTTCCAGCATCCTTCACC ACGTGGCAGGAGTCTGCCACAGAGGGGTGTTGATTGCCTTTCCTCACATTTCCAGGAACTGAGTATCTACCAAGA GAAACTTGGGACTCCGAAGAAAGAAATCAATCGAGTTTTATACTCCCTGGCAAAGAAGGGCCAAGCTACAGAAAGA GGCAGGAACACCCCCTTTGTGGAAAATCGCGGTCTCCACTCAGGCTTGGAACCAGCAGCAGCGGAGTGGTAAGACC AGACGGTCATAGCCAAGGAGCCCCAAACTCAGACCCGAGTTTGGAACCGGAAGACAGAAACTCCACATCTGTCTC AGAAGATCTTCTTGAGCCTTTTATTGCAGTCTCAGCTCAGGCTTGGAACCAGCACAGCGGAGTGGTAAGACCAGA CAGTCATAGCCAAGGATCCCCAAACTCAGACCCAGGTTTGGAACCTGAAGACAGCAACTCCACATCTGCCTTGGA AGATCCTCTTGAGTTTTTAGACATGGCCGAGATCAAGGAGAAAATCTGCGACTATCTCTTCAATGTGTCTGACTC CTCTGCCCTGAATTTGGCTAAAAATATTGGCCTTACCAAGGCCCGAGATATAAATGCTGTGCTAATTGACATGGA GCAAATCAAGAGAAATACGAACAGTGTTCCTGAAACCGCTCCAGCTGCAATCCCTGAGACCAAAAGAAACGCAGA GTTCCTCACCTGTAATATACCCACATCAAATGCCTCAAATAACATGGTAACCACAGAAAAAGTGGAGAATGGGCA GGAACCTGTCATAAAGTTAGAAAACAGGCAAGAGGCCAGACCAGAACCAGCAAGACTGAAACCACCTGTTCATTA CAATGGCCCCTCAAAAGCAGGGTATGTTGACTTTGAAAATGGCCAGTGGGCCACAGATGACATCCCAGATGACTT GAATAGTATCCGCGCAGCACCAGGTGAGTTTCGAGCCATCATGGAGATGCCCTCCTTCTACAGTCATGGCTTGCC ACGGTGTTCACCCTACAAGAAACTGACAGAGTGCCAGCTGAAGAACCCCATCAGCGGGCTGTTAGAATATGCCCA GTTCGCTAGTCAAACCTGTGAGTTCAACATGATAGAGCAGAGTGGACCACCCCATGAACCTCGATTTAAATTCCA GGTTGTCATCAATGGCCGAGAGTTTCCCCCAGCTGAAGCTGGAAGCAAGAAAGTGGCCAAGCAGGATGCAGCTAT GAAAGCCATGACAATTCTGCTAGAGGAAGCCAAAGCCAAGGACAGTGGAAAATCAGAAGAATCATCCCACTATTC CACAGAGAAAGAATCAGAGAAGACTGCAGAGTCCCAGACCCCCACCCCTTCAGCCACATCCTTCTTTTCTGGGAA GAGCCCCGTCACCACACTGCTTGAGTGTATGCACAAATTGGGGAACTCCTGCGAATTCCGTCTCCTGTCCAAAGA AGGCCCTGCCCATGAACCCAAGTTCCAATACTGTGTTGCAGTGGGAGCCCAAACTTTCCCCAGTGTGAGTGCTCC CAGCAAGAAGTGGCAAAGCAGATGGCCGCAGAGGAAGCCATGAAGGCCCTGCATGGGGAAGCCAACTCCAT GGCTTCTGATAACCAGCCTGAAGGTATGATCTCAGAGTCACTTGATAACTTGGAATCCATGATGCCCAACAAGGT TGGCTTTGCTGCTGAATTCAAGTTGGTCGACCAGTCCGGACCTCCTCACGAGCCCAAGTTCGTTTACCAAGCAAA TCTCCGTGTCTTGATTGGGGAGAACGAGAAGGCAGAACGCATGGGTTTCACAGAGGTAACCCCAGTGACAGGGGC CAGTCTCAGAAGAACTATGCTCCTCCTCAAGGTCCCCAGAAGCACAGCCAAAGACACTCCCTCTCACTGGCAG CACCTTCCATGACCAGATAGCCATGCTGAGCCACCGGTGCTTCAACACTCTGACTAACAGCTTCCAGCCCTCCTT GCTCGGCCGCAAGATTCTGGCCGCCATCATTATGAAAAAAGACTCTGAGGACATGGGTGTCGTCGTCAGCTTGGG AACAGGGAATCGCTGTGAAAGGAGATTCTCTCAGCCTAAAAGGAGAAACTGTCAATGACTGCCATGCAGAAAT AATCTCCCGGAGAGGCTTCATCAGGTTTCTCTACAGTGAGTTAATGAAATACAACTCCCAGACTGCGAAGGATAG TATATTTGAACCTGCTAAGGGAGGAGAAAAGCTCCAAATAAAAAAGACTGTGTCATTCCATCTGTATATCAGCAC TGCTCCGTGTGGAGATGGCGCCCTCTTTGACAAGTCCTGCAGCGACCGTGCTATGGAAAGCACAGAATCCCGCCA CTACCCTGTCTTCGAGAATCCCAAACAAGGAAAGCTCCGCACCAAGGTGGAGAACGGAGAAGGCACAATCCCTGT GGAATCCAGTGACATTGTGCCTACGTGGGATGGCATTCGGCTCGGGGAGAGACTCCGTACCATGTCCTGTAGTGA CAAAATCCTACGCTGGAACGTGCTGGGCCTGCAAGGGGCACTGTTGACCCACTTCCTGCAGCCCATTTATCTCAA ATCTGTCACATTGGGTTACCTTTTCAGCCAAGGGCATCTGACCCGTGCTATTTGCTGTCGTGTGACAAGAGATGG GAGTGCATTTGAGGATGGACTACGACATCCCTTTATTGTCAACCACCCCAAGGTTGGCAGAGTCAGCATATATGA TTCCAAAAGGCAATCCGGGAAGACTAAGGAGACAAGCGTCAACTGGTGTCTGGCTGATGGCTATGACCTGGAGAT

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TCTATTTAAGAAGCTCTGCTCCTTCCGTTACCGCAGGGATCTACTGAGACTCTCCTATGGTGAGGCCAAGAAAGC TGCCCGTGACTACGAGACCGCCAAGAACTACTTCAAAAAAGGCCTGAAGGATATGGGCTATGGGAACTGGATTAG CAAACCCCAGGAGGAAAAGAACTTTTATCTCTGCCCAGTATAGTATGCTCCAGTGACAGATGGATTAGGGTGTGT GCAAGGTCTGGCCAGGCCCCCCTTTTTTCCCCCAAGTGAAGAGGCAGAAACCTAAGAAGTTATCTTTTCTTA CCCAAAGCATACATAGTCACTGAGCACCTGCGGTCCATTTCCTCTTAAAAGTTTTGTTTTGATTTGTTTCCATTT CCTTTCCCTTTGTGTTTGCTACACTGACCTCTTGCGGTCTTGATTAGGTTTCAGTCAACTCTGGATCATGTCAGG GACTGATAATTTCATTTGTGGATTACGCAGACCCCTCTACTTCCCCTCTTTCCCTTCTGAGATTCTTTCCTTGTG ATCTGAATGTCTCCTTTTCCCCCTCAGAGGGCAAAGAGGTGAACATAAAGGATTTGGTGAAACATTTGTAAGGGT AGGAGTTGAAAACTGCAGTTCCCAGTGCCACGGAAGTGTGATTGGAGCCTGCAGATAATGCCCAGCCATCCTCCC GCAGCTGGGAAGTCTAGAACCAGCCAGACTGGGTTAAGGGAGCTGCTCAAGCAATAGCAGAGGTTTCACCCGGCA GGATGACACAGACCACTTCCCAGGGAGCACGGCATGCCTTGGAATATTGCCAAGCTTCCAGCTGCCTCTTCTCC TAAAGCATTCCTAGGAATATTTTCCCCGCCAATGCTGGGCGTACACCCTAGCCAACGGGACAAATCCTAGAGGGT ATAAAATCATCTCTGCTCAGATAATCATGACTTAGCAAGAATAAGGGCAAAAAATCCTGTTGGCTTAACGTCACT GTTCCACCCGGTGTAATATCTCTCATGACAGTGACACCAAGGGAAGTTGACTAAGTCACATGTAAATTAGGAGTG TTTTAAAGAATGCCATAGATGTTGATTCTTAACTGCTACAGATAACCTGTAATTGAGCAGATTTAAAATTCAGGC ATACTTTTCCATTTATCCAAGTGCTTTCATTTTTCCAGATGGCTTCAGAAGTAGGCTCGTGGGCAGGGCGCAGAC CTGATCTTTATAGGGTTGACATAGAAAGCAGTAGTTGTGGGTGAAAGGGCAGGTTGTCTTCAAACTCTGTGAGGT AGAATCCTTTGTCTATACCTCCATGAACATTGACTCGTGTGTTCAGAGCCTTTGGCCTCTCTGTGGAGTCTGGCT CTCTGGCTCCTGTGCATTCTTTGAATAGTCACTCGTAAAAACTGTCAGTGCTTGAAACTGTTTCCTTTACTCATG TTGAAGGGACTTTGTTGGCTTTTAGAGTGTTGGTCATGACTCCAAGAGCAGAGCAGGGAAGAGCCCAAGCATAGA CTTGGTGCCGTGGTGATGCCTGCAGTCCAGTTTTGTGATGCTGCTTTTACGTGTCCCTCGATAACAGTCAGCTAG TTCATCTGGGAACGTGCTGAGCCACCCTCAGATGATTTCCCTCCAAACTGCTGACTAGGTCATCCTCTGTCT GGTAGAGACATTCACATCTTTGCTTTTATTCTATGCTCTCTGTACTTTTGACCAAAAATTGACCAAAGTAAGAAA ATGCAAGTTCTAAAAATAGACTAAGGATGCCTTTGCAGAACACCAAAGCATCCCAAGGAACTGGTAGGGAAGTGG CGCCTGTCTCCTGGAGTGGAAGAGGCCTGCTCCCTGGCTCTGGGTCTGCTGGGGGCACAGTAAATCAGTCTTGGC ACCCACATCCAGGGCAGAGAGGTCTGTGGTTCTCAGCATCAGAAGGCAGCCGCAGCCCCTCTCCTCTTCAGGCTAC AGGGTTGTCACCTGCTGAGTCCTCAGGTTGTTTGGCCTCTCTGGTCCATCTTGGGCATTAGGTTCTCCAGCAGAG CTCTGGCCAGCTGCCTCTTCTTTAACTGGGAACACAGGCTCTCACAAGATCAGAACCCCCACTCACCCCCAAGAT CTTATCTAGCAAGCCTGTAGTATTCAGTTTCTGTTGTAGGAAGAGAGCGAGGCATCCCTGAATTCCACGCATCTG CTGGAAACGAGCCGTGTCAGATCGCACATCCCTGCGCCCCCATGCCCCTCTGAGTCACACAGGACAGAGGAGGCA TTCTTTTTAATGATTTTTGTAGTTGATTTGTCTGAACTGTGGCTACTGTGCATTCCTTGAATAATCACTTGTAAA AÁTTGTCAGTGCTTGAAGCTGTTTCCTTTACTCACATTGAAGGGACTTCGTTGGTTTTTTTGGAGTCTTGGTTGTG ACTCCAAGAGCAGAGTGAGGAAGACCCCCAAGCATAGACTCGGGTACTGTGATGATGGCTGCAGTCCAGTTTTAT ATCTGAATTCTT

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GAGCCAGCGAGGAGTGAAGCTGAGCCTGGCCTCACACGCTCCTAGAGGACCACCTCCTGAGAGAGTTCTTTCACC GGACTCCAGGCAGCCCCAGAGAACCGAAGCAAGCCAAAGAGAGAGGACTGGAGCCAAGATACTGGTGGGGGAGATTG AGCCAGGCCCCAAGATGGACACTTCTGGGCACTTCCATGACTCGGGGGTGGGGGACTTGGATGAAGACCCCAAGT CGCCACCAGCAGCCCCCAGCAGCCCCTGGGACCCTCGCTGCAGCCTCAGCCTCCGCAGCTTCAGCAGCAGCAGC TCCACCTGGCCTGCACCTCTCCCCACCGCTTTCAGGGCCCCCCCTTCGTCCAACTCCACCGCCATCCTCC CAAGTGGGCCTGGCGGAGGCAGCCGGCACCGACAGCCCCCTGGTGCACCGGCGGGACAGCAACCCCTTCA CGGAGATCGCCATGAGCTCCTGCAAGTATAGCGGTGGGGTCATGAAGCCCCTCAGCCGCCTCAGCGCCTCCCGGA GGAACCTCATCGAGGCCGAGACTGAGGGCCCAACCCCTCCAGCTTTTCAGCCCTAGCAACCCCCGGAGATCGTCA CCGGCACCACCGCCAGCAGCACCACCTTCCCCAAAGCCAACAAGCGGAAAAACCAAAACATTGGCTATAAGCTGG GACACAGGAGGGCCCTGTTTGAAAAGAGAAAGCGACTGAGTGACTATGCTCTGATTTTTGGGATGTTTGGAATTG TTGTTATGGTGATAGAGACCGAGCTCTCTTGGGGTTTGTACTCAAAGGACTCCATGTTTTCGTTGGCCCTGAAAT GCCTTATCAGTCTGTCCACCATCATCCTTTTGGGCTTGATCATCGCCTACCACACGTGAAGTCCAGCTCTTCG TGATCGACAATGGCGCGGATGACTGGCGGATAGCCATGACCTACGAGCGCATCCTGTACATCAGCCTGGAGATGC TGGTGTGCGCCATCCACCCCATTCCTGGCGAGTACAAGTTCTTCTGGACGGCACGCCTGGCCTTCTCCTACACAC CCTCCCGGGCGGAGGCCGATGTGGACATCATCCTGTCTATCCCCATGTTCCTGCGCCTGTACCTGATCGCCCGAG TCATGCTGCTGCACAGCAAGCTCTTCACCGATGCCTCGTCCCGCAGCATCGGGGCCCTCAACAAGATCAACTTCA ACACCCGCTTTGTCATGAAGACGCTCATGACCATCTGCCCTGGCACTGTGCTGCTCGTGTTCAGCATCTCTCTGT GGATCATTGCTGCCTGGACCGTCCGTGTCTGTGAAAGGTACCATGACCAGCAGGACGTAACTAGTAACTTCTGG GTGCCATGTGGCTCATCTCCATCACATTCCTTTCCATTGGTTATGGGGACATGGTGCCCCACACATACTGTGGGA AAGGTGTCTCTCCTCACTGGCATCATGGGTGCAGGCTGCACTGCCCTTGTGGTGGCCGTGGTGGCCCGAAAGC TGGAACTCACCAAAGCGGAGAAGCACGTTCATAACTTCATGATGGACACTCAGCTCACCAAGCGGATCAAGAATG CTGCAGCCAATGTCCTTCGGGAAACATGGTTAATCTATAAACACACAAAGCTGCTAAAGAAGATTGACCATGCCA AAGTGAGGAAACACCAGAGGAAGTTCCTCCAAGCTATCCACCAGTTGAGGAGCGTCAAGATGGAACAGAGGAAGC TGAGTGACCAAGCCAACACTCTGGTGGACCTTTCCAAGATGCAGAATGTCATGTATGACTTAATCACAGAACTCA ATGACCGGAGCGAAGACCTGGAGAAGCAGATTGGCAGCCTGGAGTCGAAGCTGGAGCATCTCACCGCCAGCTTCA ACTCCCTGCCGCTGCTCATCGCCGACACCCTGCGCCAGCAGCAGCAGCAGCTCCTGTCTGCCATCATCGAGGCCC GGGGTGTCAGCGTGGCAGTGGGCACCACCCCACACCCCAATCTCCGATAGCCCCCATTGGGGTCAGCTCCACCTCCT AGATGCAAATCAACTCTCTCCTGGTCGCTTTGCCATCAAGAAACATTCAGACCAGGGAACGGAAAGAAGAAGAGA CGAGCTAATTAACTAACTCATGTTCATTCAGCGTGCTTGGTCCGACATGCCTTGAAACCAGAAATCTAATCTCTG TTTAGGTGCCTCTACTTGGGAGCGGGAAGAGGAGATGACAGGAAGCGACGCCTCTGGCAGGGCCCTTGCTGCAGA GTTGGTGGAGAACAGAAATCCACGCTCAATCTCAGGTCTTCACGCGGGGGGTGGGGGTCAGATGCACTGAAGTAG

484/6881 FIGURE 452

GAAGGTTCTGGGCGGGGCTGGACTGTTCTAAGTGAGTTCGGGTGGGGGAGCTTCACGAGGGGAGGCTGCTCTGTG AAGGAACCGCCTTTCTCCCCCGTGTCTCACCCTTTTCTCCCCATATCTGTTTGGACATGAGCTGAGGGCACGGT CGCGGGCGGTCAGCCCTGTTCGCAGCTACGGCGAGGAGGGGGCGCGATTGTTCCTTGTTGCCGCTCCGCTTAGTGG $\tt CCGCGTCCATTCCGCGCGTGTCCCGATTTTAGGGGTAGGGAGAAGTGTCAGCTTCAGGCATCGCGAGGCGTGGC$ GGCCCCATGCCCCGCTGGGAGGCGCCCCGCGGCTGGTACTGCTGTTCAGCGGCAAGAGGAAATCCGGGAAGGAC TTCGTGACCGAGGCGCTGCAGAGCAGACTTGGAGCTGATGTCTGTGCTGTCCTCCGGCTCTCTGGTCCACTCAAG GAACAGTATGCTCAGGAGCATGGCTTGAACTTCCAGAGACTCCTGGACACCAGCACCTACAAGGAGGCCTTTCGG AAGGACATGATCCGCTGGGGAGAGGGAGAAACGCCAGGCTGACCCAGGCTTCTTTTGCAGGAAGATTGTGGAGGGC ATCTCCCAGCCCATCTGGCTGGTGAGTGACACACGGAGGTGTCTGACATCCAGTGGTTTCGGGAGGCCTATGGG GTGGACGATGCTGAGTCAGAATGTGGCCTGGACAACTTCGGGGACTTTGACTGGGTCATCGAGAACCATGGAGTT GAACAGCGCCTGGAGGAGCAGTTGGAGAACCTGATAGAATTTATCCGCTCCAGACTT<u>TAG</u>TCACTAGGTTCTAGG AGTGAGCTGGGGCCTGCTGAGGTGGGGGTGGGGCTGACTCTGCAAAATGGGGGTGTCCCCCGATCCTGGCCGAGG CTCATTTTCTCCATGGGGAAGACAGCCATGCTCTTCAGGAGGAGACTCCAAGGGCAAAGGAGGTGTCTTGGCTG TGCTTGAAGGCGAAACCCTGCCATATCCCCAGTGCCAGTCCCCTCAGCCTGTGGTGGCCTTGCATCCTGACTGGA TGTTCTCAGCCCCTTGTTCTGGGCAAGAACCCAGAGCTCCCCAGTGTGGATACTAATAAACCTCTTGGAGCACAC

MAPLGGAPRLVLLFSGKRKSGKDFVTEALQSRLGADVCAVLRLSGPLKEQYAQEHGLNFQRLLDTSTYKEAFRKD MIRWGEEKRQADPGFFCRKIVEGISQPIWLVSDTRRVSDIQWFREAYGAVTQTVRVVALEQSRQQRGWVFTPGVD DAESECGLDNFGDFDWVIENHGVEQRLEEQLENLIEFIRSRL

ATGGGGCCTGAAACTGTCTGGGTCTGAGCTGGGGAGCCGGAAGCCACTTGTCCCTCTCCCCCAGGACTTCTGT GCAGGGGGCCAGGCTGGGCAGCCCCTCTTTCACCTCAACTATGGATCTCCTGCCCCCAAGCCCAAGTACA ATCCACTCCGGAATGAGTCTCTGTCATCGCTGGAGGAAGGGGCTTCTGGGTCCACCCCCCGGAGGAGCTGCCTT CCCCATCAGCTTCATCCCTGGGGGCCCATCCTGCCTCCTCTGCCTGGGGACGATAGTCCCACTACCCTGTGCTCCT TCTTCCCCCGGATGAGCAACCTGAGGCTGGCCAACCCGGCTGGGGGGCCCCAGGGTCTAAGGGGGAGCCAGGAA GGGCAGCTGATGATGGGGGAGGGGATCGTAGGGGGCAGCCATGCCAGACTCAGGCCCCCTACCCCTCCTCCAGGACA TGAACAAGCTGAGTGGAGGCGGGGGGCGAGGACTCGGGTGGAAGGGGGCCAGCTTGGGGGGGAGGAGTGGACCC CCTACTTGGTTCGGTACATGGGTTGTGGGAGGTCCTCCAGTCAATGCGTGCCCTGGACTTCAACACCCGGACTC AGGTCACCAGGGAGGCCATCAGTCTGGTGTGTGAGGCTGTGCCGGGTGCTAAGGGGGGCGACAAGGAGGAGAAAGC CCTGTAGCCGCCCGCTCAGCTCTATCCTGGGGAGGAGTAACCTGAAATTTGCTGGAATGCCAATCACTCTCACCG CATTTGCATCCGGCGGGGATCCGGACACAGCCGAGTATGTCGCCTATGTTGCCAAAGACCCTGTGAATCAGAGAG CCTGCCACATTCTGGAGTGTCCCGAAGGGCTTGCCCAGGATGTCATCAGCACCATTGGCCAGGCCTTCGAGTTGC GGGGGGTGGTAGACATGAGGCTTCGGGAAGGAGCCGCTCCAGGGGCTGCTCGACCCACTGCACCCAATGCCCAGA CCCCCAGCCACTTGGGAGCTACATTGCCTGTAGGACAGCCTGTTGGGGGAGATCCAGAAGTCCGCAAACAGATGC CACCTCCACCCCTGTCCAGGCAGAGAGCTTTTTGATGATCCCTCCTATGTCAACGTCCAGAACCTAGACAAGG CCCGGCAAGCAGTGGTGGTGCTGGGCCCCCCAATCCTGCTATCAATGGCAGTGCACCCCGGGACCTGTTTGACA TGAAGCCCTTCGAAGATGCTCTTCGCGTGCCTCCACCTCCCCAGTCGGTGTCCATGGCTGAGCAGCTCCGAGGGG AGCCCTGGTTCCATGGGAAGCTGAGCCGGCGGAGGCTGAGGCACTGCTGCAGCTCAATGGGGACTTCCTGGTAC GGGAGAGCACCACCTGGCCAGTATGTGCTCACTGGCTTGCAGAGTGGGCAGCCTAAGCATTTGCTACTGG TGGACCCTGAGGGTGTGGTTCGGACTAAGGATCACCGCTTTGAAAGTGTCAGCTATCAGCTACCACATGG ACAATCACTTGCCCATCATCTCTGCGGGCAGCGAACTGTGTCTACAGCAACCTGTGGAGCGGAAACTGTGATCTG CCCTAGCGCTCTCTCCAGAAGATGCCCTCCAATCCTTTCCACCCTATTCCCTAACTCTCGGGACCTCGTTTGGG AGGGTTTGAGTCAAAAGCCTGGGTGAGAATCCTGCCTCTCCCCAAACATTAATCACCAAAGTATTAATGTACAGA GTGGCCCTCACCTGGGCCTTTCCTGTGCCAACCTGATGCCCCTTCCCCAAGAAGGTGAGTGCTTGTCATGGAAA ATGTCCTGTGGTGACAGGCCCAGTGGAACAGTCACCCTTCTGGGCAAGGGGGAACAAATCACACCTCTGGGCTTC AGGGTATCCCAGACCCCTCTCAACACCCGCCCCCCCATGTTTAAACTTTGTGCCTTTGACCATCTCTTAGGTCT AATGATATTTTATGCAAACAGTTCTTGGACCCCTGAATTCAATGACAGGGATGCCAACACCTTCTTGGCTTCTGG GACCTGTGTTCTTGCTGAGCACCCTCTCCGGTTTGGGTTGGGATAACAGAGGCAGGAGTGGCAGCTGTCCCCTCT GCTCAGTGCCTCCTGGCCGGGGCCCCTCACCCCAAGGGGTCTGTATATACATTTCATAAGGCCTGCCCTCCCATG TTGCATGCCTATGTACTCTACGCCAAAGTGCAGCCCTTCCTCCTGAAGCCTCTGCCCTGCCTCCCTTTCTGGGAG GGCGGGGTGGGGTGACTGAATTTGGGCCTCTTGTACAGTTAACTCTCCCAGGTGGATTTTGTGGAGGTGAGAAA AGGGGCATTGAGACTATAAAGCAGTAGACAATCCCCACATACCATCTGTAGAGTTGGAACTGCATTCTTTTAAAG TTTTATATGCATATATTTTAGGGCTGTAGACTTACTTTCCTATTTTCTTTTCCATTGCTTATTCTTGAGCACAAA ATGATAATCAATTATTACATTTATACATCACCTTTTTGACTTTTCCAAGCCCTTTTACAGCTCTTGGCATTTTCC CTAGGACTAGAAAAACTTGGGTCTCTTACCGCGAGACTGAGAGGCAGAAGTCAGCCCGAATGCCTGTCAGTTTCA TGGAGGGGAAACGCAAAACCTGCAGTTCCTGAGTACCTTCTACAGGCCCGGCCCAGCCTAGGCCCGGGGTGGCCA CACCACAGCAAGCCGGCCCCCCCTCTTTTGGCCTTGTGGATAAGGGAGAGTTGACCGTTTTCATCCTGGCCTCCT TTTGCTGTTTGGATGTTTCCACGGGTCTCACTTATACCAAAGGGAAAACTCTTCATTAAAGTCCGTATTTCTTCT

487/6881 FIGURE 455

GAAAGAGCCGGTGAAGGGGCAGAACAGGCAGGTTCCCTCGACCCAGGACCCCTGTTCCCAGGCTATGGCCCCCA GTGCCCTGTAGACCTGCAGGCCCCCGTGCTTGCGACCCCTATTTGGGGGGTCTGGGTGGCTACTGGAGGGCCTT GCAGAGGGGCAGAGAGGCAGGACCATGACATCTAGGGCCTCTGAACTTTCTCCGGGGCGCAGCGTGACGCTGG CATCATCATTGTTGGAGATGAGATCCTTAAGTTGGAAACAACAAATGGCTTTTGAGTCCAAGAGTGATGCAATCA CAGTGACGCATTAAAACGGTTACTCCGGAGACATCAGAGCACTGTGGCTGGAGGCTGGGAGCCTGGCCAGGAAGC GGCGTGGTGGCTCACACCTATAATTCCAGCACTTTGGGAGGCTGAGGCAGGAGGATCACTTGAGACCAGGAATTC AACACCAGCCTGGGCAACATGGCAAGACCCCATTTCTACAAAAAAATTTAAAATGAGCTGAATGTGGTGGCACG CGCCTGTAGTCCCAGCTACTCGGAAGGCTGGGGTGGCCCTTGAAGCCAGGAGGTTGAGGCTGCAGTGAACTGTGA GTCCAGTCCAGGCCCTCAGCAGCCTGAGGTGGTGTCCTTCAAAGAGCAGCACTGCATCATCAGGTGGATGCA ${\tt GCCATCATCTTCAACCCCTTCATCCCTACAGTACTGATGGCCTCATCTTCCCCTTCAACCCCCAGGGACA}$ CACTCAGGACACCACCACTTCTTTCTGTGCCGGACACTGCGCTCCCTAGGGGTCCAGGTTTGCCGAGTCTCAGT TGTACCTGATGAGGTAGCCACCATTGCAGCTGAGGTCACTTCTTCTCCAACCGCTTCACCCATGTCCTCACAGC AGGGGGCATCGGCCCCACTCATGATGTGACCTTTGAGGCAGTGGCACAGGCCTTTGGAGATGAGCTGAAGCC $\verb|CTACCTCTTCCCAGGCATTCCAGAGCTGCTGCGGCGGGTGCTGGAGGGGATGAAGGGACTATTCCAAAACCCAGC| \\$ TGTTCAGTTCCACTCAAAGGAGCTATATGTGGCTGCTGATGAAGCCTCCATCGCCCCCATTCTGGCTGAGGCCCA TCTAGACTCAGAGGAAGAAGGACCCCTGGAGGAATGCTTGGCCTACCTGACTGCCCGTTTGCCCCAGGGATCGCT GGTCCCCTACATGCCCAACGCTGTGGAGCAGGCCAGTGAGGCTGTATACAAACTCGCTGAATCAGGTAGGGACCT TATGGAGGAGGGCATTATGCCCAAAGCCATTGGTGGCACCCCAGATCTCAGTAATGCAGGGGCTGTTGGGTGCT СТААЛААЛААЛААЛААЛААЛААЛААЛААЛААЛААЛА

MQPSSSTPPLHPYSTDGLIFPFNPQGHTQDTNTFFLCRTLRSLGVQVCRVSVVPDEVATIAAEVTSFSNRFTHVL TAGGIGPTHDDVTFEAVAQAFGDELKPHPKLEAATKALGGEGWEKLSLVPSSARLHYGTDPCTGQPFRFPLVSVR NVYLFPGIPELLRRVLEGMKGLFQNPAVQFHSKELYVAADEASIAPILAEAQAHFGRRLGLGSYPDWGSNYYQVK LTLDSEEEGPLEECLAYLTARLPQGSLVPYMPNAVEQASEAVYKLAESGRDLMEEGHYAQSHWWHPRSQ

CCCAAATATAGGTGGCACTGAGGAGCAGCAGGCAGAGTCAGAGAAGGCCCCGAGGGAGCCCTTGGAGCCCCAGGT CCTTCAGGACGATCTCCCAATTAGCCTCAAAAAGGTGCTTCAGACCAGTCTGCCTGAGCCCCTGAGGATCAAGTT GGAGCTGGACGGTGACAGTCATATCCTGGAGCTGCTACAGAATAGGGAGTTGGTCCCAGGCCGCCCAACCCTGGT GTGGTACCAGCCCGATGGCACTCGGGTGGTCAGTGAGGGACACACTTTGGAGAACTGCTGCTACCAGGGAAGAGT GCGGGGATATGCAGGCTCCTGGGTGTCCATCTGCACCTGCTCTGGGCTCAGAGGCTTGGTGGTCCTGACCCCAGA GAGAAGCTATACCCTGGAGCAGGGGCCTGGGGACCTTCAGGGTCCTCCCATTATTTCGCGAATCCAAGATCTCCA CCTGCCAGGCCACACCTGTGCCCTGAGCTGGCGGGAATCTGTACACACTCAGACGCCACCAGAGCACCCCCTGGG ACAGCGCCACATTCGCCGGAGGCGGGATGTGGTAACAGAGACCAAGACTGTGGAGTTGGTGATTGTGGCTGATCA CTCGGAGGCCCAGAAATACCGGGACTTCCAGCACCTGCTAAACCGCACACTGGAAGTGGCCCTCTTGCTGGACAC ATTCTTCCGGCCCCTGAATGTACGAGTGGCACTAGTGGGCCTGGAGGCCTGGACCCAGCGTGACCTGGTGGAGAT CAGCCCAAACCCAGCTGTCACCCTCGAAAACTTCCTCCACTGGCGCAGGGCACATTTGCTGCCTCGATTGCCCCA TGACAGTGCCCAGCTGGTGACTGGTACTTCATTCTCTGGGCCTACGGTGGGCATGGCCATTCAGAACTCCATCTG TTCTCCTGACTTCTCAGGAGGTGTGAACATGGACCACTCCACCAGCATCCTGGGAGTCGCCTCCTCCATAGCCCA TGAGTTGGGCCACAGCCTGGGCCTGGACCATGATTTGCCTGGGAATAGCTGCCCCTGTCCAGGTCCAGCCCCAGC CAAGACCTGCATCATGGAGGCCTCCACAGACTTCCTACCAGGCCTGAACTTCAGCAACTGCAGCCGACGGGCCCT GGAGAAAGCCCTCCTGGATGGAATGGGCAGCTGCCTCTTCGAACGGCTGCCTAGCCTACCCCCTATGGCTGCTTT CTGCGGAAATATGTTTGTGGAGCCGGGCGAGCAGTGTGACTGTGGCTTCCTGGATGACTGCGTCGATCCCTGCTG TGATTCTTTGACCTGCCAGCTGAGGCCAGGTGCACAGTGTGCATCTGACGGACCCTGTTGTCAAAATTGCCAGCT GCGCCCGTCTGGCTGGCAGTGTCGTCCTACCAGAGGGGATTGTGACTTGCCTGAATTCTGCCCAGGAGACAGCTC TTGTGCCTCCTATGCCCAGCAGTGCCAGTCACTTTGGGGACCTGGAGCCCAGCCGGCGCGCCACTTTGCCTCCA GACAGCTAATACTCGGGGAAATGCTTTTGGGAGCTGTGGGCGCAACCCCAGTGGCAGTTATGTGTCCTGCACCCC TAGAGATGCCATTTGTGGGCAGCTCCAGTGCCAGACAGGTAGGACCCAGCCTCTGCTGGGCTCCATCCGGGATCT ACTCTGGGAGACAATAGATGTGAATGGGACTGAGCTGAACTGCAGCTGGGTGCACCTGGACCTGGGCAGTGATGT GGCCCAGCCCTCCTGACTCTGCCTGGCACAGCCTGTGGCCCTGGCCTGGTGTATAGACCATCGATGCCAGCG TGTGGATCTCCTGGGGGCACAGGAATGTCGAAGCAAATGCCATGGACATGGGGTCTGTGACAGCAACAGGCACTG CTACTGTGAGGAGGGCTGGGCACCCCTGACTGCACCACTCAGCTCAAAGCAACCAGCTCCCTGACCACAGGGCT GCTCCTCAGCCTCCTGGTCTTATTGGTCCTGGTGATGCTTGGTGCCGGCTACTGGTACCGTGCCCGCCTGCACCA GCGACTCTGCCAGCTCAAGGGACCCACCTGCCAGTACAGGGCAGCCCAATCTGGTCCCTCTGAACGGCCAGGACC GCCTGCCGACCCCCAGGGCCGGTGCCCATCGGGTGACCTGCCCGGCCCAGGGGCTGGAATCCCGCCCCTAGTGGT ${\tt ACCCTCCAGACCAGCGCCACCGCCTCCGACAGTGTCCTCGCTCTACCTC}{{\tt TGA}{\tt CCTCTCCGGAGGTTCCGCTGCCT}}$ CCAAGCCGGACTTAGGGCTTCAAGAGGCGGGCGTGCCCTCTGGAGTCCCCTACCATGACTGAAGGCCGCCAGAGAC TGGCGGTGTCTTAAGACTCCGGGCACCGCCACGCGCTGTCAAGCAACACTCTGCGGACCTGCCGGCGTAGTTGCA GCGGGGGCTTGGGGGGCTGGGGGTTGGACGGGATTGAGGAAGGTCCGCACAGCCTGTCTCTGCTCAGTTGCA

490/6881 FIGURE 458

MRLALLWALGLLGAGSPLPSWPLPNIGGTEEQQAESEKAPREPLEPQVLQDDLPISLKKVLQTSLPEPLRIKLEL
DGDSHILELLQNRELVPGRPTLVWYQPDGTRVVSEGHTLENCCYQGRVRGYAGSWVSICTCSGLRGLVVLTPERS
YTLEQGPGDLQGPPIISRIQDLHLPGHTCALSWRESVHTQTPPEHPLGQRHIRRRRDVVTETKTVELVIVADHSE
AQKYRDFQHLLNRTLEVALLLDTFFRPLNVRVALVGLEAWTQRDLVEISPNPAVTLENFLHWRRAHLLPRLPHDS
AQLVTGTSFSGPTVGMAIQNSICSPDFSGGVNMDHSTSILGVASSIAHELGHSLGLDHDLPGNSCPCPGPAPAKT
CIMEASTDFLPGLNFSNCSRRALEKALLDGMGSCLFERLPSLPPMAAFCGNMFVEPGEQCDCGFLDDCVDPCCDS
LTCQLRPGAQCASDGPCCQNCQLRPSGWQCRPTRGDCDLPEFCPGDSSQCPPDVSLGDGEPCAGGQAVCMHGRCA
SYAQQCQSLWGPGAQPAAPLCLQTANTRGNAFGSCGRNPSGSYVSCTPRDAICGQLQCQTGRTQPLLGSIRDLLW
ETIDVNGTELNCSWVHLDLGSDVAQPLLTLPGTACGPGLVCIDHRCQRVDLLGAQECRSKCHGHGVCDSNRHCYC
EEGWAPPDCTTQLKATSSLTTGLLLSLLVLVLVLWLGAGYWYRARLHQRLCQLKGPTCQYRAAQSGPSERPGPPQ
RALLARGTKSQGPAKPPPPRKPLPADPQGRCPSGDLPGPGAGIPPLVVPSRPAPPPPTVSSLYL

491/6881 FIGURE 459

MSGRGKQGGKARAKAKSRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPVYMAAVLEYLTAEILELAGNAARDNK KTRIIPRHLQLAIRNDEELNKLLGKVTIAQGGVLPNIQAVLLPKKTESHHKAKGK

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CTTTCGCCATGCCGGCCCGATCTCCGAGCGGAATCAGGATGCCACTGTGTACGTGGGGGGCCTGGATGAGA AGGTTAGTGAACCGCTGCTGTGGGAACTGTTTCTCCAGGCTGGACCAGTAGTCAACACCCACATGCCAAAGGATA TCATGAACATGATCAAACTCTATGGGAAGCCAATACGGGTGAACAAAGCATCAGCTCACAACAAAAACCTGGATG TAGGGGCCAACATTTCATTGGGAACCTGGACCCTGAGATTGATGAGAAGTTGCTTTATGATACTTTCAGCGCCT TTGGGGTCATCTTACAAACCCCCAAAATTATGCGGGACCCTGACACAGGCAACTCCAAAGGTTATGCCTTTATTA ATTTTGCTTCATTTGATGCTTCGGATGCAGCAATTGAAGCCATGAATGGGCAGTACCTCTGTAACCGTCCTATCA CCGTATCTTATGCCTTCAAGAAGGACTCCAAGGGTGAGCGCCATGGCTCAGCAGCCGAACGACTTCTGGCAGCTC AGAACCCGCTCTCCCAGGCTGATCGCCCTCATCAGCTGTTTGCAGATGCACCTCCTCCACCCTCTGCTCCCAATC CTGTGGTATCATCATTGGGGTCTGGGCTTCCTCCACCAGGCATGCCTCCTCGGCTCCTTCCCACCCCAGTGC CACCTCCTGGAGCCCTCCCACCTGGGATACCCCCAGCCATGCCCCCACCACCTATGCCTCCTGGGGCTGCAGGAC ATGGCCCCCATCGGCAGGACCCCAGGGGCAGGACATCCTGGTCATGGACACTCACATCCTCACCCATTCCCAC CGGGTGGGATGCCCCATCCAGGGATGTCTCAGATGCAGCTTGCACACCATGGCCTCATGGCTTAGGACATCCCC ACGCTGGACCCCAGGCTCTGGGGGCCAGCCACCGCCCGACCACCTGGAATGCCTCATCCTGGACCTCCTC CAATGGGCATGCCCCCCGAGGGCCTCCATTCGGATCTCCCATGGGTCACCCAGGTCCTATGCCTCCGCATGGTA TGCGTGGACCTCCTCCACTGATGCCCCCCCATGGATACACTGGCCCTCCACGACCCCCACCCTATGGCTACCAGC GGGGGCCTCTCCCTCCACCCAGACCCACTCCCCGGCCACCAGTTCCCCCTCGAGGCCCACTTCGAGGCCCTCTCC CTCAGTAAATTCACATTTTCCTTCCTCCTGTTACATTTTCCCAATATCTTTTCTATTCCTTGGACCAATCAGAGA TGCTGTAGCTCCTTGGGGCAAAGGTACTAATCCCTTTCAGCACCCCCACTCCATTCCCCTTTTTAATGTAACTTT TTCCACAGGAGGTATTTCTTTTTTATGTTGGTCCTGAGTATTTTGCAAATGCACAGAGAAAATAAAACTAAACTC СТТСТТАААААААААААААААААА

$$\label{topic} \begin{align} MAAGPISERNQDATVYVGGLDEKVSEPLLWELFLQAGPVVNTHMPKDRVTGQHQGYGFVEFLSEEDADYAIKIMN\\ MIKLYGKPIRVNKASAHNKNLDVGANIFIGNLDPEIDEKLLYDTFSAFGVILQTPKIMRDPDTGNSKGYAFINFA\\ SFDASDAAIEAMNGQYLCNRPITVSYAFKKDSKGERHGSAAERLLAAQNPLSQADRPHQLFADAPPPPSAPNPVV\\ SSLGSGLPPPGMPPPGSFPPPVPPPGALPPGIPPAMPPPPMPPGAAGHGPPSAGTPGAGHPGHGHSHPHPFPPGG\\ MPHPGMSQMQLAHHGPHGLGHPHAGPPGSGGQPPPRPPPGMPHPGPPPMGMPPRGPPFGSPMGHPGPMPPHGMRG\\ PPPLMPPHGYTGPPRPPPYGYQRGPLPPPRPTPRPPVPPRGPLRGPLPQ\\ \end{align*}$$

495/6881 FIGURE 463A

GCCGGGAGCAGTCGCCGCTGCCGCCCCGCGCGGGCCCGGGACCCCCGTCCTCGCCCGGGACTCCTTACCCGGGG AACCTAGACCAGGTCTCCAGAGGCTTGTGGAAGAAGCAGGCGACCCTTCCTGAGTTATCCTGGCTTAGCCTCC CAATCTGGCTCCCCTTCCCCTTCCCCTGCTCCCCTGTCCCTTCCCCATCCACCCAACTGAACTGGGTA CCCAGAGATACTGGAACACGCTTCATCTAAGTAACTGTGGGGAGGGGTCTTTTTGACTCTACAAGTCCTTGAGCA AAAAGCTGAAAAAGAAGCAGGAGGTGGAGAAGACCCAGTGAAGTGCCCCAAGCCCCATC<u>ATG</u>GAAGAGGGCTTCC GAGACCGGGCAGCTTTCATCCGTGGGGCCAAAGACATTGCTAAGGAAGTCAAAAAGCATGCGGCCAAGAAGGTGG TGAAGGGCCTGGACAGAGTCCAGGACGAATATTCCCGAAGATCGTACTCCCGCTTTGAGGAGGAGGATGATGATG ATGACTTCCCTGCTCCCAGTGATGGTTATTACCGAGGAGGAGGGACCCAGGATGAGGAGGAAGGTGGTGCATCCA GTGATGCTACTGAGGGCCATGACGAGGATGATGAGATCTATGAAGGGGAATATCAGGGCATTCCCCGGGCAGAGT TACGGGAGTGTGGCCACGGCCGCTTCCAGTGGACACTGTATTTTGTGCTTGGTCTGGCGCTGATGGCTGACGGTG TGGAGGTCTTTGTGGTGGGCTTCGTGCTGCCCAGCGCTGAGAAAGACATGTGCCTGTCCGACTCCAACAAAGGCA TGCTAGGCCTCATCGTCTACCTGGGCATGATGGTGGGAGCCTTCCTCTGGGGAGGTCTGGCTGACCGGCTGGGTC GGAGGCAGTGTCTGCTCATCTCGCTCTCAGTCAACAGCGTCTTCGCCTTCTTCTCATCTTTTTGTCCAGGGTTACG GCACTTTCCTCTTCTGCCGCCTACTTTCTGGGGTTGGGATTGGAGGGTCCATCCCCATTGTCTTCTCCTATTTCT CCGAGTTTCTGGCCCAGGAGAAACGAGGGGAGCATTTGAGCTGGCTCTGCATGTTTTGGATGATTGGTGGCGTGT ACGCAGCTGCTATGGCCTGGGCCATCATCCCCCACTATGGGTGGAGTTTTCAGATGGGTTCTGCCTACCAGTTCC ACAGCTGGAGGGTCTTCGTCCTCGTCTGCGCCTTTCCTTCTGTGTTTTGCCATTGGGGGCTCTGACCACGCAGCCTG AGAGCCCCCGTTTCTTCCTAGAGAATGGAAAGCATGATGAGGGCCTGGATGGTGCTGAAGCAGGTCCATGATACCA ACATGCGAGCCAAAGGACATCCTGAGCGAGTGTTCTCAGTAACCCACATTAAGACGATTCATCAGGAGGATGAAT TGATTGAGATCCAGTCGGACACAGGGACCTGGTACCAGCGCTGGGGGGTCCGGGCCTTGAGCCTAGGGGGGCAGG TTTGGGGGAATTTTCTCTCCTGTTTTGGTCCCGAATATCGGCGCATCACTCTGATGATGATGGGTGTGTGGTTCA CCATGTCATTCAGCTACTATGGCCTGACCGTCTGGTTTCCTGACATGATCCGCCATCTCCAGGCAGTGGACTACG CATCCCGCACCAAAGTGTTCCCCGGGGAGCGCGTAGAGCATGTAACTTTAACTTCACGTTGGAGAATCAGATCC ACCGAGGCGGCAGTACTTCAATGACAAGTTCATTGGGCTGCGGCTCAAGTCAGTGTCCTTTGAGGATTCCCTGT TTGAAGAGTGTTATTTTGAGGATGTCACATCCAGCAACACGTTTTTCCGCAACTGCACATTCATCAACACTGTGT TCTATAACACTGACCTGTTCGAGTACAAGTTTGTGAACAGCCGTCTGATAAACAGTACATTCCTGCACAACAAGG AGGGCTGCCCGCTAGACGTGACAGGGACGGGCGAAGGTGCCTACATGGTATACTTTGTGAGCTTCCTGGGGACAC CCAGCGTGATGTCCTGTCTTCTTCCTGTCTTTTTGGGAACAGTGAGTCGGCCATGATCGCTCTCT GCCTTTTTGGCGGGGTCAGCATTGCATCCTĢGAATGCGCTGGACGTGTTGACTGTTGAACTCTACCCCTCAGACA AGAGGACCACAGCTTTTGGCTTCCTGAATGCCCTGTGTAAGCTGGCAGCTGTGCTGGGGGATCAGCATCTTCACAT CCTTCGTGGGAATCACCAAGGCTGCACCCATCCTCTTTGCCTCAGCTGCCCTTGCCCTTGGCAGCTCTCTGGCCC ${\tt TGAAGCTGCCTGAGACCCGGGGGGGGGGTGCTGCAG{\color{blue} {\tt TGAAGGGGTCTCTAGGGCTTTGGGATTGGCAGGCACACTG}}}$ TGAGACCAACACTCCTTCCCTTCCCTGCCCTGCCATCCTGACCTCCAGAGCCCTCACTCCCCACTCCCCG TGTTTGGTGTCTTAGCTGTGTGCGTGTGCGTGTGCATGTGTAAACCCCGTGGGCAGGGACTACAGGGAAGG CTCCTTCATCCCAGTTTTGAGATGAAGCTGTACTCCCCATTTCCCACTGCCCTTGACTTTGCACAAGAGAAGGCT GAGCCCCATCCTTCTCCCCCTGTTAGAGAGGGGCCCTTGCTTCCCTGTTCCAGGGGTTCCAGAATAGGCTTCCTG CCTTCCCCATCATTCCCTCTGCCTAGGCCCTGGTGAAACCACAGGTATGCAATTATGCTAGGGGCTGGGGCTCTG GTGTAGACCATGGACCAAAAGAACTTCTTAGAGTCTGAAGAGTGGGCCTCGGGTGCCCTCTCACATCTCCTGTTG GATGCTGGGGGAGAAGCAATAAACCTCAGCCCTCTGGCCTCCACTTTCCTCTCAATTTGGGCTGCAAATATGAAG TGTGTGAATGTGTATGTATACTTACATATGTGTGTGCCATGTGCCATGGGGCGGGGGGTATCACTATACTGTCCTC CTGTGTTGAGCCTGGGATGGAGGAGCCCTAGGCCAGCCTGGGATAAGAGTCCCACAGTCTAGGGAGATCTGAGGG

496/6881 FIGURE 463B

MEEGFRDRAAFIRGAKDIAKEVKKHAAKKVVKGLDRVQDEYSRRSYSRFEEEDDDDDFPAPSDGYYRGEGTQDEE EGGASSDATEGHDEDDEIYEGEYQGIPRAESGGKGERMADGAPLAGVRGGLSDGEGPPGGRGEAQRRKEREELAQ QYEAILRECGHGRFQWTLYFVLGLALMADGVEVFVVGFVLPSAEKDMCLSDSNKGMLGLIVYLGMMVGAFLWGGL ADRLGRRQCLLISLSVNSVFAFFSSFVQGYGTFLFCRLLSGVGIGGSIPIVFSYFSEFLAQEKRGEHLSWLCMFW MIGGVYAAAMAWAIIPHYGWSFQMGSAYQFHSWRVFVLVCAFPSVFAIGALTTQPESPRFFLENGKHDEAWMVLK QVHDTNMRAKGHPERVFSVTHIKTIHQEDELIEIQSDTGTWYQRWGVRALSLGGQVWGNFLSCFGPEYRRITLMM MGVWFTMSFSYYGLTVWFPDMIRHLQAVDYASRTKVFPGERVEHVTFNFTLENQIHRGGQYFNDKFIGLRLKSVS FEDSLFEECYFEDVTSSNTFFRNCTFINTVFYNTDLFEYKFVNSRLINSTFLHNKEGCPLDVTGTGEGAYMVYFV SFLGTLAVLPGNIVSALLMDKIGRLRMLAGSSVMSCVSCFFLSFGNSESAMIALLCLFGGVSIASWNALDVLTVE LYPSDKRTTAFGFLNALCKLAAVLGISIFTSFVGITKAAPILFASAALALGSSLALKLPETRGQVLQ

GGCAGGAAAAGCGGAAGAGGGAGCGAAAACCAACGTGTTCGGTGACAGACCCCAGCGCCGACTGAGCCTCTAAAG CGGGGGGCACGAGGGACAGCTGAGGGAAGGGAGGACGCGAGAGAAACAGCGCGAGCACGCTGAGGGCCGGGGGTT GCCAGGAGAGGGGCCCGCGGACCCGCAGAGCGGAGGAAGGTCCGGGAGAAAAGGGGCGGGACGGAGAAATCCG GAGATCCGACAGCAGGGAACCGGAGCGCTCCGGGGGAGGGGCTTAATGCTGGGGAAGGGATGTCTTAAAAGAGGA GAAGCTTTAAATTAGACGATCGGAGAAGGCTGAGGGAATTGCTATGAAGGGGCGGGAGCTGAAGTGTAGAGGACT CCTTTAGACAGCAGAAAGGGAAAGCCGTTGAGAAGTTCCCTTCAAACTCCACCTGCCTCCTCCAATTCAAACT CCCGCAATTTGAATTTTAGCCTAGGGGAATCAAAATAGTAGGAGCATTACTCTTGTTTCCTTTTTCAAAATCCCA CACCTCATCCTTCCTGCGACGCCATGTCCACCAACATTTGTAGTTTCAAGGACAGGTGCGTGTCCATCCTGTGTT TCTCTACAGACATCCCTCCTACCAACGCAGTGGACTTCACTGGAAGATGCTATTTCACCAAAATCTGCAAATGTA AACTGAAGGACATCGCATGTTTAAAATGTGGGAACATTGTAGGTTATCATGTGATTGTTCCATGTAGTTCCTGTC TTCTTTCCTGCAACAACAGACACTTCTGGATGTTTCACAGCCAGGCAGTTTATGATATTAACAGACTAGACTCCA CAGGTGTAAACGTCCTACTTCGGGGCAACTTGCCAGAGATAGAAGAGAGTACAGATGAAGATGTGTTAAATATCT TAATGGATCAACTTTAAAATTGTTAGTTGCCAGTGATCTTTTTTGGAAAACAAAAATGGGGCATTTGTTGATTTA TCCTCTCCCCCACCTTTTTCTGCCCAGTGTAGGTGTATTCTTAAATTCAGACGGGAAGATTCTTTCACATATCAC TCAGTTACCTCCCAATCTGGGGGGGTTTTTCTTACAACTTGATACCAGATACCATTAATTTTACATTCCTGAATA AAGGCCTAGTACCCACGCATATTTCAACCATGCATATATCAAGTTCAACCGAGTTTTAATAGGGGATTAAAAAAA CAAGCTGTTAGGTTTCCATGGGCACTGGTTCTCATAGGTTCTATTGGTGATAACTGCTTTAACATGGAGCAAGAG TTTGTGAATCAGGAAATAGAATAAAATTAAAATTTAAAATATATAGAGGAATCCTCTTGATTGCTCAGCATGATGT ATTATGGATATTGTATTATGAGAGCTAAACCTAAATAAGTTATCCTGTTCCCTAGGACCTTCTCTGTAAATAGTG

CAGCAGTGCTGTTTACTCATTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCA AGAAGAGGAAGAAGACCAAGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGT CTTGCAGGACTCACTGGATAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTA TGGAAGTTCCTTTTATGCATTGGAGGAAAAGCATGTTGGCTTTTCTCTTGACGTGGGAGAAATTGAAAAGAAGGG AAACCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGATGAGAAAGGGCCTGAAGTCTTGCAGGACTCACTGGA ATTGGAGCAACAGCGTGTTGGCTTGGCTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCA AGACCCATCATGCCCCAGGCTCAGCGGGGAGCTGTTGGATGAGAAAGAGCCTGAAGTCTTGCAGGAGTCACTGGA ${\tt ATTGGAGCAACAGCGTGTTGGCTTGTTGACATGGATGAAATTGAAAAGTACCAAGAAGTGGAAGAAGACCA}$ AGACCCATCATGCCCCAGGCTCAGCAGGAGCTGCTGGATGAGAAAGAGCCTGAAGTCTTGCAGGACTCACTGGG TAGATGTTATTCGACTCCTTCAGGTTATCTTGAACTGCCTGACTTAGGCCAGCCCTACAGCAGTGCTGTTTACTC ATTGGAGGAACAGTACCTTGGCTTGGCTCTTGACGTGGACAGAATTAAAAAGGACCAAGAAGAAGAAGAAGAACCA AGGCCCACCATGCCCCAGGCTCAGCAGGGAGCTGCTGGAGGTAGTAGAGCCTGAAGTCTTGCAGGACTCACTGGA TAGATGTTATTCAACTCCTTCCAGTTGTCTTGAACAGCCTGACTCCTGCCAGCCCTATGGAAGTTCCTTTTATGC GCTCAACAGCATGCTGATGGAAGTGGAAGAGCCTGAAGTCTTGCAGGACTCACTGGATATATGTTATTCGACTCC GTCAATGTACTTTGAACTACCTGACTCATTCCAGCACTACAGAAGTGTGTTTTACTCATTTGAGGAAGAGCATAT ${\tt CAGCTTCGCCCTTTACGTGGACAATAGGTTTTTTACTTTGACGGTGACAAGTCTCCACCTGGTGTTCCAGATGGG}$ GAAGATTTGAATGAAAGTACAGTTCCATTTGGAAGCCCAGACATAGGATGGGTCAGTGGGCATGGCTCTATTCCT ATTCTCAAACCATGCCAGTGGCAACCTGTGCTCAGTCTGAAGACAATGGACCCACGTTAGGTGTGACACGTTCAC ATAACTGTGCAGCACATGCCGGGAGTGATCAGTCAGACATTTTAATTTGAACCACGTATCTCTGGGTAGCTACAA AATTCCTCAGGGATGTCATTTTGCAGGCATGTCTCTGAGCTTCTATACCTGCTCAAGGTCATTGTCATCTTTGTG TTTAGCTCATCCAAAGGTGTTACCCTGGTTTCAATGAACCTAACCTCATTCTTTGTGTCTTCAGTGTTGGCTTGT TTTAGCTGATCCATCTGTAACACAGGAGGGATCCTTGGCTGAGGATTGTATTTCAGAACCACCAACTGCTCTTGA GAAGACCACAGCTAGATGGACAAACAGCATTGGGAGGCCTTAGCCCTGCTCCTCTAATTCCATCCTGTAGAGAA CAGGAGTCAGGAGCCGCTGGCAGGAGCAGCATGTCACCCAGGACTCTGCCGGTGCAGAATATGAGCAATGCCAT GTTCTTGCAGAAAACGCTTAACCTGAGTTTCATAGGAGGTAATCACCAGACAACTGCAGAATGTAGAACACTGAG TCGGTTGAAAAAAGTAAAAAGATA

MDEIEKYQEVEEDQDPSCPRLSRELLDEKEPEVLQDSLGRCYSTPSGYLELPDLGQPYSSAVYSLEEQYLGLALD VDRIKKDQEEEEDQGPPCPRLSRELLEVAEPEVLQDSLDRCYSTPSSCLEQPDSCQPYGSSFYALEEKHVGFSLD VGEIEKKGKGKKRRGRRSKKERRRGRKEGEEDQNPPCPRLNGVLMEVEEPEVLQDSLDICYSTPSMYFELPDSFQ HYRSVFYSFEEEHISFALYVDNRFFTLTVTSLHLVFQMGVIFTQ

CTCTGTGACATTTCCAATTTTAGATAATGCCTCACATCTCTGTCCCCCGGGACCCCCTGGAGCCCCCATGATCC $\tt CTAAGAAGACAGCTTGAACCTAGATCTCACCCCCAGG\underline{ATG}TTGCGGAGGCTGCTGGAGCGGCCTTGCACGCTGGC$ CCTGCTTGTGGGCTCCCAGCTGGCTGTCATGATGTACCTGTCACTGGGGGGGCTTCCGAAGTCTCAGTGCCCTATT GGCCCCAGGGGGTCCTCCAGCTCCTCAAGGTCTGCCCTACTGTCCAGAACGATCTCCTCTTTAGTGGGTCCTGT GTCGGTGTCCTTTAGCCCAGTGCCATCACTGGCAGAGATTGTGGAGCGGAATCCCCGGGTAGAACCAGGGGGCCG GTACCGCCTGCAGGTTGTGAGCCCCGCTCCCGAACAGCCATCATTGTGCCTCATCGTGCCCGGGGAGCACCACCT GGCTGGAAATGGAACATTTAACAGGGCAAAACTGTTGAACGTTGGGGTGCGAGAGGCCCTGCGTGATGAAGAGTG ACCCCGCCATGTTGCCGTTGCTATGAACAAGTTTGGATACAGCCTCCCGTACCCCCAGTACTTCGGAGGAGTCTC AGCACTTACTCCTGACCAGTACCTGAAGATGAATGGCTTCCCCAATGAATACTGGGGCTGGGGTGGTGAGGATGA CGACATTGCTACCAGGGTGCGCCTGGCTGGGATGAAGATCTCTCGGCCCCCACATCTGTAGGACACTATAAGAT GGTGAAGCACCGAGGAGATAAGGGCAATGAGGAAAATCCCCACAGATTTGACCTCCTGGTCCGTACCCAGAATTC CTGGAUGCAAGATGGGATGAACTCACTGACATACCAGTTGCTGGCTCGAGAGCTGGGGCCTCTTTATACCAACAT CACAGCAGACATTGGGACTGACCCTCGGGGTCCTCGGGCTCCTTCTGGGCCACGTTACCCACCTGGTTCCTCCCA CCTCCGAGGTTCACACTGACTCCTCCTTCCTGTCTACCTTAATCATGAAACCGAATTCATGGGGTTGTATTCTCC CCACCCTCAGCTCCTCACTGTTCTCAGAGGGATGTGAGGGAACTGAACTCTGGTGCCGTGCTAGGGGGTAGGGGC CTTATGACTGTGAATCCTTGATGTCATGATTTTATGTGACGATTCCTAGGAGTCCCTGCCCCTAGAGTAGGAGCA GGGCTGGACCCCAAGCCCCTCCTCTCCATGGAGAGAGAGTGATCTGGCTTCTCCTCGGACCTCTGTGAATAT ATAGCTCCCTCTTCTGGTCCTGGCTCAGGGGGCTGGGATTTTGATATATTTTCTAATAAAGGACTTTGTCTCGC

502/6881 FIGURE 469

MLRRLLERPCTLALLVGSQLAVMMYLSLGGFRSLSALFGRDQGPTFDYSHPRDVYSNLSHLPGAPGGPPAPQGLP YCPERSPLLVGPVSVSFSPVPSLAEIVERNPRVEPGGRYRPAGCEPRSRTAIIVPHRAREHHLRLLLYHLHPFLQ RQQLAYGIYVIHQAGNGTFNRAKLLNVGVREALRDEEWDCLFLHDVDLLPENDHNLYVCDPRGPRHVAVAMNKFG YSLPYPQYFGGVSALTPDQYLKMNGFPNEYWGWGGEDDDIATRVRLAGMKISRPPTSVGHYKMVKHRGDKGNEEN PHRFDLLVRTQNSWTQDGMNSLTYQLLARELGPLYTNITADIGTDPRGPRAPSGPRYPPGSSQAFRQEMLQRRPP ARPGPLSTANHTALRGSH

GGCACGAGGGCCCCAGGAGAGGCAGAGAGTGAGGGAAAGGGCCTGGCCGGCATGCACAGATAGGATCACGGTCCT GGGAGAATTCCTGCTCTTATAGTCTAACCTACCATGGCTTCTCTTTTCTCAAGGCTCCCTCATGCTGCCCTTTGG AGCCAGGAGCTGTGGGAGGAAACGCCCTCAGTAAAGATGACCGCGGTCACTGTTATCTAAACGCAAGTGAAGCCG AGTCACAGGACCCGGATGTTGTCAGTTCGACGGTAAACGACCCTGCCAGCTTCCAAGAGGGCGGCTTCACTGTGC GAATAGGTGAGAAGCCAAGAAGGAGGCGCGCTGGAGTTACTTCCGCCCGGGTTCTCCTTCCCGCAGTCTGCAGCCG GAGTAAGATGGCGCCCTGAGGGCTTTGTGCGGCCTTCCGGGGCGTCGCGGCCCAGGTGCTGCGGCCTGGGGCCTGG AGTCCGATTGCCGATTCAGCCCAGCAGAGGTGTTCGGCAGTGGCAGCCAGATGTGGAATGGGCACAGCAGTTTGG GGGAGCTGTTATGTACCCAAGCAAAGAAACAGCCCACTGGAAGCCTCCACCTTGGAATGATGTGGACCCTCCAAA GGACACAATTGTGAAGAACATTACCCTGAACTTTGGGCCCCAACACCCAGCAGCGCATGGTGTCCTGCGACTAGT GATGGAATTGAGTGGGGAGATGGTGCGGAAGTGTGATCCTCACATCGGGCTCCTGCACCGAGGCACTGAGAAGCT CATTGAATACAAGACCTATCTTCAGGCCCTTCCATACTTTGACCGGCTAGACTATGTGTCCATGATGTGTAACGA ACAGGCCTATTCTCTAGCTGTGGAGAAGTTGCTAAACATCCGGCCTCCTCGGGGCACAGTGGATCCGAGTGCT GTTTGGAGAAATCACACGTTTGTTGAACCACATCATGGCTGTGACCACACATGCCCTGGACCTTGGGGCCATGAC TGCTGCTTATATCCGGCCAGGAGGAGTGCACCAGGACCTACCCCTTGGGCTTATGGATGACATTTATCAGTTTTC TAAGAACTTCTCTCTCGGCTTGATGAGTTGGAGGAGTTGCTGACCAACAATAGGATCTGGCGAAATCGGACAAT TGACATTGGGGTTGTAACAGCAGAAGAAGCACTTAACTATGGTTTTAGTGGAGTGATGCTTCGGGGCTCAGGCAT CCAGTGGGACCTGCGGAAGACCCAGCCCTATGATGTTTACGACCAGGTTGAGTTTGATGTTCCTGTTGGTTCTCG AGGGGACTGCTATGATAGGTACCTGTGCCGGGTGGAGGAGATGCGCCAGTCCCTGAGAATTATCGCACAGTGTCT AAACAAGATGCCTCCTGGGGAGATCAAGGTTGATGATGCCAAAGTGTCTCCACCTAAGCGAGCAGAGATGAAGAC TTCCATGGAGTCACTGATTCATCACTTTAAGTTGTATACTGAGGGCTACCAAGTTCCTCCAGGAGCCACATATAC TGCCATTGAGGCTCCCAAGGGAGAGTTTGGGGTGTACCTGGTGTCTGATGGCAGCAGCCGCCCTTATCGATGCAA GATCAAGGCTCCTGGTTTTGCCCATCTGGCTGGTTTGGACAAGATGTCTAAGGGACACATGTTGGCAGATGTCGT TGCCATCATAGGTACCCAAGATATTGTATTTGGAGAAGTAGATCGG<u>TGA</u>GCAGGGGAGCAGCGTTTGATCCCCCC GTGTGTGTATGTTCGTGTACACTTGGCTGTCAGGCTTTCTGTGCATGTACTAAAAAAAGGAGAAATTATAATAAAT

MAALRALCGFRGVAAQVLRPGAGVRLPIQPSRGVRQWQPDVEWAQQFGGAVMYPSKETAHWKPPPWNDVDPPKDT
IVKNITLNFGPQHPAAHGVLRLVMELSGEMVRKCDPHIGLLHRGTEKLIEYKTYLQALPYFDRLDYVSMMCNEQA
YSLAVEKLLNIRPPPRAQWIRVLFGEITRLLNHIMAVTTHALDLGAMTPFFWLFEEREKMFEFYERVSGARMHAA
YIRPGGVHQDLPLGLMDDIYQFSKNFSLRLDELEELLTNNRIWRNRTIDIGVVTAEEALNYGFSGVMLRGSGIQW
DLRKTQPYDVYDQVEFDVPVGSRGDCYDRYLCRVEEMRQSLRIIAQCLNKMPPGEIKVDDAKVSPPKRAEMKTSM
ESLIHHFKLYTEGYQVPPGATYTAIEAPKGEFGVYLVSDGSSRPYRCKIKAPGFAHLAGLDKMSKGHMLADVVAI
IGTQDIVFGEVDR

CCGGAACCCAAGATGGCTGCGCTGTTGCTGAGACACGTTGGTCGTCATTGCCTCCGAGCCCACTTTAGCCCTCAG
CTCTGTATCAGAAATTGGTCTCTCCCATGGCGATGTCCATCTGCCACCGTGGCACTGGTATTGCTTTGAGTGCA
GGGGTCTCTCTTTTTGGCATGTCGGCCCTGTTACTCCCTGGGAACTTTGAGTCTTATTTGGAACTTGTAAAGTCC
CTGTGTCTGGGGCCAGCACTGATCCACACAGCTAAGTTTGCACTTGTCTCCCTCTCATGTATCATACCTGGAAT
GGGATCCGACACTTGATGTGGGACCTAGGAAAAGGCCTGAAGATTCCCCAGCTATACCAGTCTGGAGTGGTTGTC
CTGGTTCTTACTGTGTTGTCCTCTATGGGGCTGGCAGCCATGTGAAGAAAGGAGGCTCCCAGCATCATCTTCCTA
CACATTATTACATTCACCCCATCTTTCTGTTTGTCATTCTTATCTCCAGCCTGGGAAAAGTTCTCCTTATTTGTTT
AGATCCTTTTTGTATTTCAGATCTCCTTGGAGCAGTAGAGTACCTTGGTAGACCATAATAGTGGAAAAGGGTCTAG
TTTTCCCCTTGTTTCTAAAGATGAGGTGGCTGCATCTCTCCCATATTGGGCTTT

 ${\tt GCCCTTGCCTTGAGTCAGTGCGCTGCTCTCCAGCCCGCTTGAACGCTCCCCGCAGCCACCCATTGGA} \underline{{\tt AT}}$ **G**GCCAACAGGGGACCTGCATATGGCCTGAGCCGGGAGGTGCAGCAGAAGATTGAGAAACAATATGATGCAGATCT CTTCCAGAACTGGCTCAAGGATGGCACGGTGCTATGTGAGCTCATTAATGCACTGTACCCCGAGGGGCAGGCCCC AGTAAAGAAGATCCAGGCCTCCACCATGGCCTTCAAGCAGATGGAGCAGATCTCTCAGTTCCTGCAAGCAGCTGA GCGGACGCTGATGAATCTGGGTGGGCTGGCAGTAGCCCGAGATGATGGGCTCTTCTCTGGGGATCCCAACTGGTT CCCTAAGAAATCCAAGGAGAATCCTCGGAACTTCTCAGATAACCAGCTGCAAGAGGGGCAAGAACGTGATCGGGTT ACAGATGGGCACCAACCGCGGGGCGTCTCAGGCAGGCATGACTGGCTACGGGATGCCACGCCAGATCCTC<u>TGA</u>TC CCAGAGAGCCCCAGAGCTCTCAAGCTCCTTTCTGTCAGGGTGGGGGGTTCAGCCTGTCCTGTCACCTCTGAGGTG CCTGCTGGCATCCTCCCCCATGCTTACTAATACATTCCCTTCCCCATAGCCATCAAAACTGGACCAACTGGCC TCTTCCTTTCCCCTGGGACCAAAATTTAGGGGCCTCAGTCCCTCACCGCCATGCCCTGGCCTATTCTGTCTCTCC TTCTTCCCCCTGGCCTGTTCTGTCTCTGAGCTCTGTGTCCTCCGTTCATTCCATGGCTGGGAGTCACTGATGCTG $\verb|CCTCTGCCTTCTGATGCTGGACTGGCCTTGCTTCTACAAGTATGCTTCTCCCACAGCTGTGGCTGCAGGAACTTA| \\$ CAGCCTTCCCTGGCAGGGGCCCTCGTGGCTTCTCATTTTCCATTCCCTTCACTGTGGCTAAGGGGTGGGGTGAGG GTCATTTTTG

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MANRGPAYGLSREVQQKIEKQYDADLEQILIQWITTQCRKDVGRPQPGRENFQNWLKDGTVLCELINALYPEGQA PVKKIQASTMAFKQMEQISQFLQAAERYGINTTDIFQTVDLWEGKNMACVQRTLMNLGGLAVARDDGLFSGDPNW FPKKSKENPRNFSDNQLQEGKNVIGLQMGTNRGASQAGMTGYGMPRQIL

509/6881 FIGURE 476A

GTGGAGCCGAGCGGTGCGGAGCAGATCTGGTGGTTCTCCGGAGAGCAGCTTCCTCGGGTGTTACATGAGCCAAGC CCTCACTGTACAGAAGAGTGAGAGCTGAAACCTGTTCCCTGAGCTGATCAGAAGGACATCCCTTGGCCCCTCCAT CTGGGCTCCTGTGGATAGGAGGGGCTGGGTGAGCAGGCCAGCTGGGCTATGGTGTGGTGCCTCGGCCTGGCCGTC CTCAGCCTGGTCATCAGCCAGGGGGCTGACGGTCGAGGGAAGCCTGAGGTGGTATCGGTGGTGGGCCGGGCTGGG TTTGGATTCCTGCTTCCCATCTTCATCCAGTTCGGCCTCTACTCTCCCCGAATTGACCCTGATTACGTGGGACGA GTCCGGCTGCAGAAGGGGGCCTCTCTCCAGATTGAGGGTCTCCGGGTGGAAGACCAGGGCTGGTACGAGTGCCGC GTGTTCTTCCTGGACCACCACCACCCTGAAGACGATTTTGCTAACGGCTCCTGGGTGCATCTGACAGTCAATTCA CCCCCTCAATTCCAGGAGACACCTCCTGCTGTGTTGGAAGTGCAGGAACTGGAGCCTGTGACCCTGCGTTGTGTG GCCCGTGGCAGCCCCTGCCTCATGTGACGTGGAAGCTCCGAGGAAAGGACCTTGGCCAGGGCCAGGGCCAGGTG CAAGTGCAGAACGGGACGCTGCGGATCCGCCGGGTAGAGCGAGGCAGCTCTGGGGTCTACACCTGCCAAGCCTCC AGCACTGAGGGCAGCGCCACCCACCCAGCCAGCTGCTAGTGCTAGGACCCCCAGTCATCGTGGTGCCCCCAAG AACAGCACAGTCAATGCCTCCCAGGATGTTTCATTGGCCTGCCATGCTGAGGCATACCCTGCTAACCTCACCTAC AGCTGGTTCCAGGACAACATCAATGTCTTCCACATTAGCCGCCTGCAGCCCCGGGTGCGGATCCTGGTGGACGGG AGCCTGCGGCTGCTGGCCACCCAGCCTGATGATGCCGGCTGCTACACCTGTGTGCCCAGCAATGGCCTCCTGCAT CCACCCTCAGCCTCTGCCTACCTCACTGTGCTCTACCCAGCCCAGGTGACAGCTATGCCTCCTGAGACACCCCTG CCCATAGGCATGCCGGGGGTGATCCGCTGCCCGGTTCGTGCCAACCCCCCACTGCTCTTTGTCAGCTGGACCAAG GATGGAAAGGCCCTGCAGCTGGACAAGTTCCCTGGCTGGTCCCAGGGCACAGAAGGCTCACTGATCATCGCCCTG GGGAACGAGGATGCCCTGGGAGAATACTCCTGCACCCCCTACAACAGTCTTGGTACCGCCGGGCCCTCTCCTGTG ACCCGCGTGCTCAAGGCTCCCCCAGCTTTTATAGAGCGGCCCAAGGAAGAATATTTCCAAGAAGTAGGGCGG GAGCTGCTCATCCCCTGCTCCGCCCAAGGGGACCCTCCTCTTGTTGTCTCTTTGGACCAAGGTGGGCCGGGGGCTG CAAGGCCAGGCCCAGGTGGACAGCAACAGCAGCCTCATCCTGCGACCATTGACCAAGGAGGCCCACGGGCACTGG GAATGCAGTGCCAGCAATGCTGTGGCCCGAGTGGCCACCTCCACGAACGTCTACGTGCTGGGCACTAGCCCTCAT GTTGTCACCAATGTGTCCGTGGTGGCTTTGCCCAAGGGTGCCAATGTCTCCTGGGAGCCTGGCTTTGATGGTGGT TATCTGCAGAGATTCAGTGTCTGGTACACCCCACTGGCCAAGCGTCCTGACCGAATGCACCATGACTGGGTGTCC TTGGCAGTGCCTGTGGGGGCTGCTCACCTCCTAGTGCCAGGGCTGCAGCCCCACACCCCAGTACCAGTTCAGCGTG CTAGCTCAGAACAAGCTGGGGAGTGGTCCCTTCAGCGAAATCGTCTTGTCTGCTCCGGAAGGGCTTCCTACCACG CCAGCTGCACCCGGGCTTCCCCCAACAGAGATACCGCCTCCCCTGTCCCCTCCGCGGGGTCTGGTGGCAGTGAGG ACACCCCGGGGGGTACTCCTGCATTGGGATCCCCCAGAGCTGGTCCCTAAGAGACTGGATGGCTACGTCTTGGAA GGCCTCATCAAGGTATGTTCTCTACGAGTTCCGCCTCGTGGCCTTCGCGGGCAGCTTCGTCAGCGACCCCAGCAA CGTGCTGGCCGGCGTGGTGGGCGGAGTCTGCTTTCTGGGAGTGGCCGTCCTTGTGAGCATCCTGGCCGGCTGCCT CCTGAACCGGCGCAGGGCTGCCCGCCGCCGCAAGCGCCTCCGCCAAGATCCACCTCTTATCTTCTCTCCGAC CGGGAAGTCAGCTGCACCCTCTGCTCTGGGCTCAGGCAGTCCTGACAGCGTGGCGAAGCTGAAGCTCCAGGGATC $\tt CCCAGTCCCCAGCCTGCGCCAGAGTCTGCTCTGGGGGGGATCCTGCCGGAACTCCCAGCCCCAGCCCGGATCCTCC$ ATCTAGCCGGGGACCCTTACCTCTGGAGCCCATTTGCCGGGGCCCAGACGGGCGCTTTGTGATGGGGCCCACTGT GGCGGCCCCCAGGAAAGGTCAGGCCGGAGCAGGCAGAACCTCGGACTCCAGCCCAGCGTCTGGCCCGGTCCTT TGACTGTAGCAGCAGCCCCAGTGGGGCACCCCAGCCCCTCTGCATTGAAGACATCAGCCCTGTGGCACCCCC TCCAGCAGCCCACCCAGTCCCTTGCCAGGTCCTGGACCCCTGCTCCAGTACCTGAGCCTGCCCTTCTTCCGAGA GATGAATGTGGATGGGGACTGGCCCCCGCTTGAGGAGCCCAGCCCTGCTGCACCCCCAGATTACATGGATACCCG GCGCTGTCCCACCTCATCTTCCTTCGTTCTCCAGAAACCCCTCCTGTATCCCCCAGGGAATCACTTCCTGGGGC TGTGGTAGGGGCTGGGGCCACTGCAGAGCCCCCTTACACAGCCCTGGCTGACTGGACACTGAGGGAGCGGCTGCT GCGGCCCCCTCCACAGCCCCCTCTGCAGGAGGCAGCTACCTCAGCCCTGCTCCAGGAGACACCAGCAGCTGGGC CAGTGGCCCTGAGAGATGGCCCCGAAGGGAGCATGTGGTGACAGTCAGCAAGAGGGAACACATCTGTGGACGA GAACTATGAGTGGGACTCAGAATTCCCTGGGGACATGGAATTGCTGGAGACTTTGCACCTGGGCTTGGCCAGCTC CCGGCTCAGACCTGAAGCTGAGCCAGAGCTAGGTGTGAAGACTCCAGAGGAGGGCTGCCTCCTGAACACTGCCCA

510/6881 FIGURE 476B